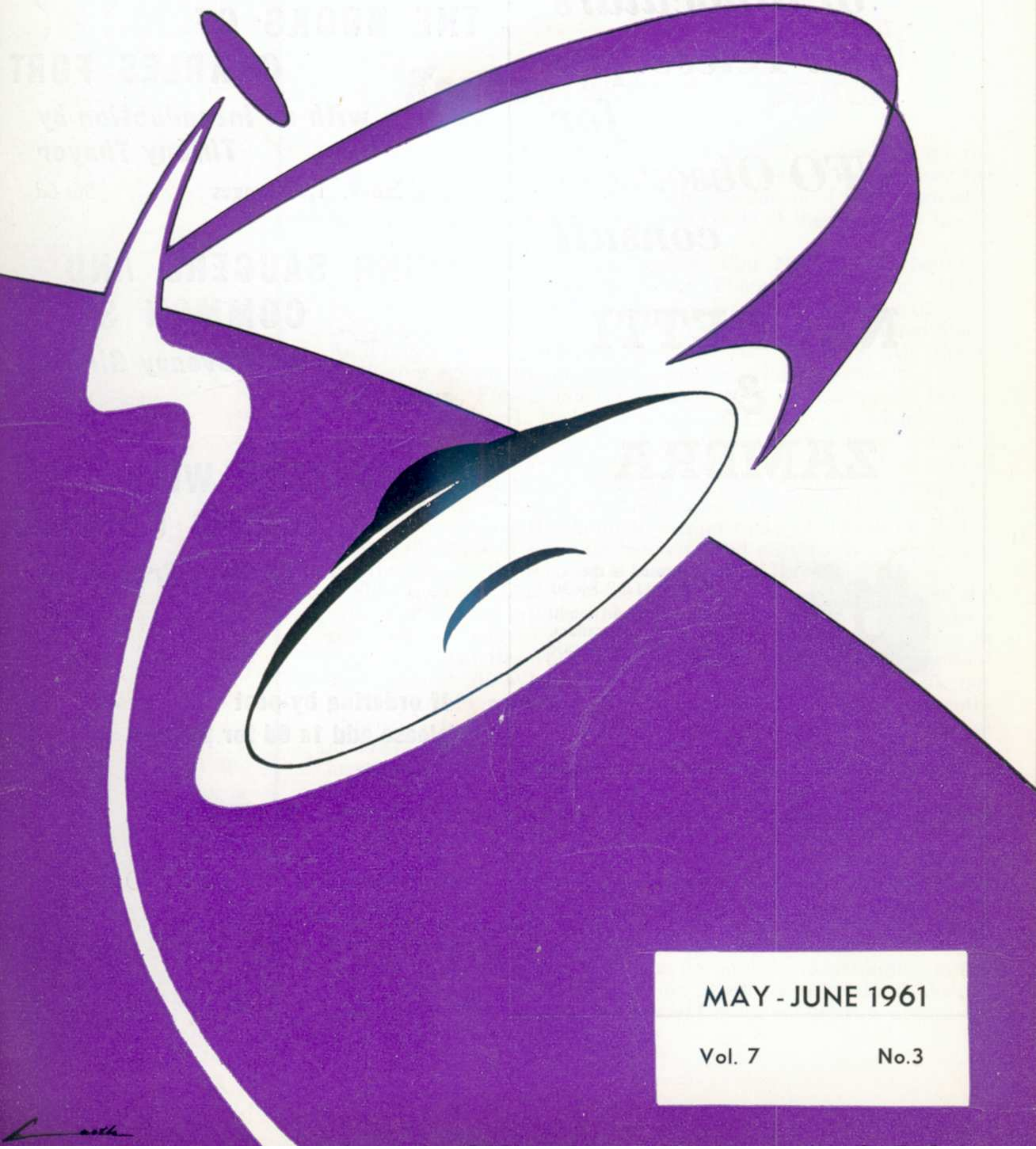
FLYING SAUCER REVIEW



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Edited by
Waveney Girvan

FLYING SAUCER REVIEW

INCORPORATING FLYING SAUCER NEWS

Vol. 7 No. 3 **MAY-JUNE 1961**

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Keyhoe versus Tacker

THE fierce battle which is being waged in America on the subject of flying saucers is having repercussions all over the world. In England, particularly, the effects of the controversy are being felt, but only the anti-saucer side of the argument has so far reached our shores.

We should explain to our readers that NICAP (the National Investigations Committee on Aerial Phenomena), led by Major Donald E. Keyhoe, has been fighting for several years against the conspiracy of silence which is alleged to be part of the United States Air Force's official policy on flying saucers. The U.S. Air Force, retaliating against the incessant attacks of Major Keyhoe, has sponsored a book, *Flying Saucers and the U.S. Air Force,* written by Lt.-Col. Lawrence J. Tacker. The book will be reviewed later in our columns, but it would be a fair summary of its contents to state that it contains the usual debunking of UFOs on the now familiar ground that all the sightings can be explained away as being conventional objects misinterpreted by the witnesses. Lt.-Col. Tacker does, it is true, allow himself the familiar escape route of admitting that a small percentage of sightings has remained obstinately inexplicable. In other words, the mixture is very much as before.

This American book, not yet published in England, has been the subject of feature articles in our daily press and has been given publicity on television. The impression gained by the public in England is that the whole question of the saucers has been settled once and for all. While this has been very depressing for us, our readers should remember that the saucers have been frequently "buried"—to quote from the words of a previous Astronomer-Royal in 1953—and every time the last rites have been performed the mysterious objects have shown even greater signs of vitality than before. Older readers will recall the first "burial" in January, 1951, when Dr. Urner Liddel, of the Office of the United States Naval Research, made a public announcement to the effect that *all* saucer sightings were caused by the Navy's cosmic-ray research balloons. Dr. Urner Liddel's name is now forgotten while the saucers go marching on: we may all rest assured that Lt.-Col. Tacker's name and views will, in time, fade away, leaving the saucers exactly where they were, as real and as inexplicable as ever.

In the battle between Major Keyhoe and the obscurantists in the United States there must be no doubt at all where we stand. We are solidly on the side of those who would bring enlightenment and we

offer Major Keyhoe and his Committee all our support and encouragement. We have been critical of NICAP in the past, but in this present struggle we must close our ranks, especially as we believe that the moment of full revelation about the flying saucers may be not too far distant.

Having so pledged ourselves, perhaps we might be allowed to make one or two suggestions, particularly as we have gone on record to the effect that we have not favoured the bringing of pressure on any government as a means of arriving at the truth. We have felt that any government, if really pressed, has all the trump cards when it comes to influencing public opinion. And there is no doubt that, for one reason or another, most of the governments of the world would prefer its public not to think seriously about the flying saucers. Our aim has always been to try to influence the public direct, though we appreciate that our method seems to take much longer. The quick break-through is always tempting and, it must be admitted, it sometimes works. Equally, a failure can be disastrous. However, we do wish Major Keyhoe every success.

In the December-January, 1960-61, issue of the *U.F.O. Investigator*, NICAP's official bulletin, there is a long and interesting account of a television debate between Lt.-Col. Tacker and Major Keyhoe. Without having witnessed the telecast it is very difficult to comment, but there would seem to be no doubt that Tacker brought sarcasm and even downright rudeness into play in his attack on NICAP's director. Major Keyhoe mentions this as proof that the Air Force has something to hide, but we wonder if that is strictly true. After having read this account very carefully, it would seem to us that Lt.-Col. Tacker's attitude could as readily spring from downright stupidity. People who hold important positions in any government are not necessarily wise. The Tackers of this world we know well: some of them get themselves promoted, and this particular one happens to think in an engrained manner that flying saucers are absolute nonsense. It is extraordinary, too, how bigoted some people on our side can get. We must occasionally allow our opponents to hold mistaken ideas quite sincerely and even passionately. Lt.-Col. Tacker's rudeness could quite easily stem from his " will-not-to-believe." There *is* such a thing as invincible ignorance.

Might we suggest to Major Keyhoe that the misinterpretation theory put forward by the U.S. Air Force will be almost impossible to disprove? And that the only way to break through may be by way of the despised contact claims? As we have remarked before, no weather balloon, no temperature inversion, no conventional object can bring us visitors in human or near-human form. This is perhaps the reason why these stories have often met with the strongest ridicule of all, and not always from those who disbelieve in flying saucers. And might we also remind Major Keyhoe that not all the saucer sightings and contact claims have come from America? Occupants of saucers have been seen—or so it is claimed—in countries as far apart as Scotland, France and Papua, to name but three. Could not NICAP help us in our search for proof of the existence of visitors from outer space? Such proof would spell the final victory and place the issue beyond all possible doubt.

A test of truth

It is a canon and a just canon that instead of assuming that people are perjuring themselves, you should, if there is a view by which you reconcile all the testimony, prefer that to the view which places people in the position of contradicting each other, so that they must necessarily be swearing what is false.

The Earl of Halsbury: Law Reports (1900), *Appeal Cases*, p. 238.

THE MYSTERY OF SPRINGHEEL JACK

by J. Vyner

In the November-December, 1960, issue of FLYING SAUCER REVIEW, Waveney Girvan called for evidence of extra-terrestrials in our midst as a check on the stories put forward by a number of contact claimants. This challenge aroused considerable interest and has produced both modern and historical evidence. In the following article, the author suggests that a notorious and almost legendary figure may have been a visitor from outer space. The facts in this article are taken from contemporary accounts and have been checked against all available records for accuracy.

ON June 30, 1837, King William IV of Great Britain and Ireland died in his bed. Simultaneously, the eighteenth century ended and the Victorian age began; already noisy with railways and steamboat whistles, waking suddenly to modernity. Within easy walking distance of Guildhall, Londoners could discover isolated hamlets, leafy lanes and lonely commons.

About the middle of November, 1837, the lanes and commons became places of dread. Through them stalked an intruder, an uncatchable monster of superhuman powers, easily evading detection and arrest.

Old reference books—few modern ones mention him—refer to the being known as "Springheel Jack," as if his identity had been positively established. They admit the name as an alias of the second Marquis of Waterford, a post-Regency Corinthian, a blue-blooded thug.

Admittedly, the Marquis's doings were wild and extravagant enough: today they would land him behind bars in a blaze of headlines. But they were always tempered with a rough good humour, and were followed by compensation for any damage done. Cockneys regarded him with a wary affection. Terrorising a countryside and scaring old ladies into fits was not characteristic of him. For once his lordship was exonerated.

Then who was Springheel Jack? If he were an impostor, then he was at least a super-impostor who carried a super-weapon—a raygun.

Springheel Jack had been prowling the lanes of Middlesex for some weeks, scaring (and sometimes tearing) the pants off the inhabitants, before the press noticed his existence. Allegations were made at the time that the newspapers had been paid to ignore the story by unspecified interested parties. Only the receipt of a letter by the Lord Mayor sitting in Common Council breached the censorship. The letter came from a stalwart friend of order who still, as then, signs himself "A Resident of Peckham."

The Lord Mayor laughed it off, and was immediately deluged with confirmation from magistrates, retired admirals and other substantial citizens. They related hair-raising accounts of outrages daily committed by a gang of maniacs dressed in unearthly garb. All the accounts agreed in their descriptions of the culprit.

His appearance

The intruder was tall, thin and powerful. He had a prominent nose, and bony fingers of immense power which resembled claws. He was incredibly agile. He wore a long, flowing cloak, of the sort affected by opera-goers, soldiers and strolling actors. On his head was a tall, metallic-seeming helmet. Beneath the cloak were close-fitting garments of some glittering material like oilskin or metal mesh. There was a lamp strapped to his chest. Oddest of all: the creature's ears were cropped or pointed like those of an animal.

The Lord Mayor could not act outside the City boundary. But he approved the setting up of a vigilante committee, formed by magistrates, army officers and others. And he informed the police. Horse patrols scoured the suburban area. Admiral Codrington organised a reward fund. The old Duke of Wellington himself set holsters at his saddle bow and rode out after dark in search of Springheel Jack. Even the most desperate of impostors would have been deterred by such opposition.

Not so Springheel Jack. He broke laws as they impeded him, physical laws as easily as parliamentary statutes. Folk called him a "Springald"—a jumping jack. They said he wore springs on his boots which enabled him to clear a road in a single bound and leap over-eight-foot walls. The truth, of course, is that you can only get out of a bounce what is put into it, and the German parachutists who attempted in 1938 to ease landing shocks with sprung boots learned that the result was an 85 per cent. incidence of broken ankles. Jack continued to soar over the heads of would-be captors, took hedges in his stride, and on one occasion overleapt a standing wagon with a canvas tilt over it. Nobody ever caught him out of training.

Starting south of the river, Jack had worked upstream to the westwards before crossing the Thames at Teddington. Then he worked his way from village to village until he reached the grounds of Kensington Palace, where he stayed some time. He was seen climbing over the park wall at midnight and dancing fantastic measures on the wooded lawns. His itinerary had taken him on a circuit of the metropolis, avoiding towns, and leaving a trail of unnerved villagers behind him. It was odd that he seemed to base himself on private parks, resting a few days in each.

Folks who had no servant to escort them stayed in after dusk. Top-hatted police, appearing in unlikely places, were mistaken for their quarry and attacked by bands of vigilantes. Then Springheel Jack started to pay calls on his neighbours.

The incident at Old Ford

On February 20, 1838, Miss Jane Alsop, a girl of eighteen who lived at Bear Bine Cottage, in the lonely village of Old Ford, near Bow, was disturbed by a violent ringing of the front-door bell. She went out, and found there a person who seemed to be wearing the top-hat and cloak of the horse patrol.

Only when she brought a light did she see the "most hideous appearance" of Springheel Jack, who cast aside his cloak to reveal close-fitting, shining garments and a flashing lamp at his breast. His eyes resembled red balls of fire!

Miss Alsop screamed, and only then did the visitor become hostile. He seized her arm in an iron grip of clawlike fingers, but one of her sisters came hurriedly to the rescue. Jack at once spurted balls of fire into the girl's face and fled, leaving her unconscious. In his flight, Jack apparently dropped his cloak, which was immediately snatched up by another person lurking in the shadows, who sped after him and was lost to sight in the darkness.

All accounts of this episode agree that there was a wanton attack on Jane Alsop, but the facts do not bear out this theory. Before her screams roused the household, Jack made no attempt to molest the girl. Indeed, her reaction seems to have come as a shock to him. Was he expecting to be received as a friend?

"Tall, thin and gentlemanly"

Two days earlier, though not revealed until after the Old Ford incident had made headlines, a Miss Scales, of Limehouse, was walking through Green Dragon Alley. The alley was a dim-lit passage beside a public house, and when she saw a tall figure lurking in the shadows Miss Scales hesitated, waiting for her sister who had fallen behind.

The sister, who described the loiterer as "tall, thin and (save the mark) gentlemanly," came up in time to see his long cloak thrown aside, and a lantern flashing on the startled girl. There was no time to scream; Jack's weird blue flame spurted into his victim's face and she dropped to the ground in a deep swoon. Whereupon, Jack walked calmly away.

There is a suggestion here that Springheel Jack had a rendezvous in Green Dragon Alley. Possibly he was waiting for that companion who had retrieved his cloak at Old Ford. Conceivably, he was to meet, by appointment, some contact who would take him to the safe house he had been seeking for the past three months. In any event, Springheel Jack's anabasis was nearing its end.

A week after the Old Ford adventure, on February 27, Jack paid his last call. He knocked on the door of a house in Turner Street, off Commercial Road, and enquired for the master of the house, a Mr. Ashworth. The servant lad, confronted by this startling apparition, screamed the place down, drawing neighbours to the spot. Jack, who had learned the lesson of Old Ford, promptly withdrew.

It was the last time that Springheel Jack's exploits roused headlines from the London papers. From that day, he vanished as abruptly as if the earth had swallowed him up. Rounding off the loose ends of their investigations or dropping them as they stood, the police never troubled to ask the obvious questions. Hoaxers were to invoke Jack's name from time to time, and for years afterwards night encounters with white-clad bakers, stray donkeys or inoffensive ghosts revived the legend. Under the infamous name of Springheel Jack the Marquis of Waterford was duly canonised.

There is no comment, anywhere, on coinci-

dences. But it is notable that, within a radius of less than a mile, Jack paid two visits and was encountered once within the space of ten days. This is the pattern of intention, of purpose. Immediately Jack localised his activities all trace of him was lost. I suggest that a contact had been made.

Unremarked by contemporaries: that in the metropolis—perhaps nowhere alse—was triplicity of Green Dragon Alleys or Passages, duplication of Turner Streets. That in the distortion of the unfamiliar names like Ashworth and Alsop may sound similar.

Unknown to 1838: Aircrew, baled out over hostile territory. Strange the suggestion of evasion, living off the land, stealing clothes and food. Hard to find the safe house where lives the agent who can put them on the road home.

Known to 1838: Springheel Jack—tearing clothes from men's backs, stealing the pieman's stock. Whose outlandish uniform passes muster only by night. Who bases himself in parks where game abounds.

A great ball of fire

Inspector Hemer of the Liverpool police may unwittingly have witnessed the final escape of Springheel Jack from his incarnation of 1837-1838. He was patrolling the long boundary of Toxteth Park, near Liverpool, on the night of July 6, 1838. A vivid flash of "lightning" drew his attention to a great ball of fire which hung motionless over a nearby field.

The object remained stationary for about two minutes, then, emitting showers of brilliant sparks, it sank swiftly to the ground and disappeared. The Inspector wheeled his horse about, and rode away from his chance of apprehending England's most-wanted character.

Inspector Hemer's reactions show that policemen and flying saucers haven't much changed in the past hundred and twenty years. Neither has Springheel Jack. In subsequent incarnations he has been seen, at intervals, throughout the years, usually in isolated encounters which suggest a run ashore to stretch cramped limbs after days of close confinement.

He turned up at Aldershot, Hants, in 1877, dressed in his uniform of tights and shining helmet. He soared over the heads of two sentries posted by the magazine, landing noiselessly beside them. Both men fired without effect, whereupon Jack stunned them with a burst of his blue fire and made off.

Is this blue fire a stupefying gas? Or is it the visible product of a magnetic effect transmitted along a beam of polarised light from Jack's mysterious lantern? Intense magnetic fields produce effects comparable to those experienced by Jack's victims—and by those who have ventured too near grounded saucers. Though the inverse square law governing radiation is commonly thought to prevent development of paralysing ray devices small enough to be easily portable, a concentrated beam might trigger off a magnetic disturbance in the vicinity of its target.

The reappearances

In 1944, towards the end of August, Springheel Jack appeared at Mattoon, Illinois, U.S.A. In this incarnation, he appeared by night at open windows, as if in search of someone known to him by sight. Those who saw him—mainly women—were left stunned by a device pointed at them which made consciousness dissolve in a fiery whirl. This time, however, a strange, cloying smell was left behind in the room he had entered.

For nearly a month Jack flitted through the bedrooms of Mattoon with the energy of a Groucho Marx. Then, as suddenly as he had come, he disappeared in a night of strange and widespread hysteria. Such phenomena, indeed, as have been associated with intense magnetic disturbance—or with saucer landings. The hysteria did not, however, spread to the wall of state and local police who encircled the town so that no human being should have been able to evade their dragnet. Possibly Jack soared over their heads as he had done many times in the past.

The enigma of Springheel Jack's astounding leaps is, like the siren's song, not entirely beyond conjecture. It is possible that a being from a high-gravity planet might be able to duplicate some of his feats on our own; likewise, there is the possibility of his employing an individual rocket device, such as U.S. Army engineers have developed. Such a device can carry a man over wide rivers and standing trees, but what happens on landing?

All the accounts of Jack's feats seem to indicate that he had perfect control over his mighty bounds. In fact, his silent landings indicate buoyancy. The buoyancy of the balloon-jumper with a gasbag attached to shoulder harness. But, despite observations of Jack's "carrying something on his back," I am inclined to think the solution must lie in the possession of a device

for neutralising gravity. Normally, the user would reduce his weight to a point at which he could walk normally while retaining the capacity for tremendous leaps. Increasing the power would enable him to soar, or even float. But he would then lose control . . . unless he had wings. Light, collapsible wings, serving as control surfaces, requiring little muscular effort to use.

Springheel Jack in his former incarnation as Icarus. No fixed abode. Seen June 18, 1953, at Houston, Texas, sitting in a Pecan tree. Seen Louisville, Kentucky, July 28, 1880. Seen October 3, 1883, at Warwick. Seen over the Aegean Sea, October, 1954; at Chehalis, Washington, U.S.A., on January 6, 1948.

Incidentally, I believe that a fund initiated by Admiral Codrington in January, 1838, was deposited with a London banker as a reward for the apprehension of a certain Springheel Jack. So far as I can ascertain the reward remains unclaimed.

THE FIRST EARTHMAN IN SPACE

AS we were about to go to press the news was announced from Russia on April 12 that they had succeeded not only in launching a man into space but that they had also successfully managed his re-entry into our atmosphere and his safe landing on Earth. Whether he was, in fact, the first Earthman to enter space we may never know—or may not know for some time—for it is rumoured that at least one Russian pioneer died in outer space in 1960.*

The significance of this achievement cannot be over-estimated. A truly major step towards the stars has been taken by the Soviet Union in the person of Major Yuri Alexyevich Gagarin, former Red Air Force pilot. Until he is successfully challenged he can claim to be the only man to have seen the Earth and survived. The Russian spaceship Vostok (East) is also a pioneer in that it has actually travelled on a predetermined path in outer space with a human aboard and has returned to its home base on Earth. The Russians have set themselves the target year of 1967 as a date to land an Earthman on the Moon, but, as our contributor, W. Schroeder, has pointed out, the next most important step forward in space travel is the discovery of a more efficient and economical fuel. Such a discovery could advance the landing by several years: such a discovery can be predicted almost with certainty. The Moon and even the other planets of our solar system are nearer to us than we think.

Our natural jubilation at Earthman's pioneering success must be tempered by the knowledge that every step that is taken in outer space has been motivated by a military purpose. The pioneers in the new dimension—as in so many other adventures in the past—have been prompted more by fear than by a quest for knowledge. Those who may doubt this statement need only reflect on the uses to which our conquest of the sea and of the inner air have been put during living memory. While we applaud we must also tremble: if Earthman were allowed to use his new-found powers for destruction the future could contain nothing but uncalculated evil and disaster.

Every step towards the stars also leads us nearer to the truth. That we are not alone in the universe has been obvious to all our readers for some considerable time. The denial of this truth, therefore, cannot be much longer sustained. At some stage on this adventurous passage to the stars one spaceman will meet another and a new chapter of history, of a bewildering complexity, will have to be written and understood. Naturally, not a word about this aspect of the Russian achievement has appeared in the press of any of the countries of the world: the rearguard action against the truth of the flying saucers will be fought until the last possible moment. But Major Yuri Alexyevich Gagarin's epoch-making flight has brought that moment appreciably nearer.

* See FLYING SAUCER REVIEW, Jan.-Feb., 1961.

DANGER FROM THE STARS

A Warning from the Space Administration

ACCORDING to a report in the *New York Times* as quoted in the Vancouver *Province* for February 7, the National Aeronautics and Space Administration has warned that discovery of intelligent life on other stars could cause earth civilisation to collapse. This was followed by a recommendation that the world should prepare itself for such an eventuality. The report, prepared by the Brookings Institution, said, " while the discovery of intelligent life in other parts of the universe is not likely in the immediate future, it could nevertheless happen at any time." The report continued by stating that discovery of intelligent beings on other planets could lead to an all out effort by earth to contact them, or it could lead to sweeping changes or even the downfall of civilisation.

Even on earth, the report added, " societies sure of their own place have disintegrated when confronted by a superior society, and others have survived even though changed. Clearly, the better we can come to understand the factors involved in responding to such crises the better prepared we may be."

The rest of the report deals with recommendations for further study of other space activities, including the diplomatic and propaganda effects and the implications of communications and weather satellites. On the question of life in outer space, the report said that if intelligent or semi-intelligent beings were discovered in the next twenty years they would probably be found by radio communications with other solar systems. Evidence of such existence " might also be found in artifacts left on the moon or other planets."

The value of this report

This report is of extreme interest and importance to students of flying saucers. Here, perhaps, is the first intimation of the real reason why it has proved so difficut to gain a wide public acceptance for the reality of the UFO and its inter-planetary origin. Whether the authors of the report realise that the saucers are proof of intelligent life in other parts of the universe we do not know, but we believe that they have discovered the real reason for their rejection by governments, the Press and the majority of the public in practically every country in the world.

The conspiracy of silence—if it exists—is sometimes explained as an attempt to shield the public from panic. What we believe is more likely is that it is a subconscious safeguard against despair. The fear that the saucers have brought with them is not that of a physical attack upon our bodies but of an almost unsupportable assault upon our minds and the habits of thought built up through many centuries. When the truth of the saucers finally breaks upon the world — as break it must—the effect upon those who had previously dismissed them as nonsensical will be paralysing. Those of us who have been studying the saucers for many years can have no idea of how the news will be received by those who have fought to remain in ignorance. The shock to public opinion could be great enough to bring down every government in the world, leaving an interregnum of chaos and mental confusion until there were discovered new leaders who would be prepared to explain and guide the world to a completely new concept of life.

As the various establishments have fought against the truth about the saucers, they will be the first to suffer a complete eclipse. Had they been prepared to keep at least an open mind on the subject, all might have been well. As it is, it seems likely that some happening which cannot be explained away will burst on the public consciousness with a truly cosmic shock. Afterwards, when the moment of reflection becomes possible, the public will address the inevitable question to every government which has kept silent: " Why weren't we told before?" Most governments, through some undisclosed fear, have allowed a number of excellent opportunities to pass: there have been several occasions when partial revelation could have been safely vouchsafed. It is, of course, not too late even now, but all the signs are that the public at large will be allowed to ignore the saucers, or treat them as some sort of joke, until the news can be contained no longer. When that happens what the government says or does not say will matter no more.

THE COSMOS— EXPANDING OR ORBITAL?

BY LEONARD G. CRAMP

It is several years since the author of *Space, Gravity and the Flying Saucer* wrote for the REVIEW. He now contributes an original and topical theory which cuts right across the current controversy between Professors Hoyle and Ryle.

THE recent news of a major contribution to the expanding universe theory has stimulated wide interest among the general public. This surprising reaction is surely indicative of the increasing space consciousness of the thinking population. How much of this is the result of the stepped-up space programme and how much can be attributed to UFO activity is largely speculative, but the fact remains that the interest in cosmological affairs is increasing.

Slowly, but quite definitely, a significant pattern is emerging. Young people often display more than a little inquisitiveness about the outer void. More children take for granted that they live on a huge ball surrounded by space, whereas only a few years ago this concept would have been difficult to grasp even for adolescents.

In the light of all this, one cannot help but wonder what quickened strides would be made if the scientific world would loosen just a little its restrictive thinking. If only for a moment it would admit to the truth in other less sought-after explanations.

The current news of this latest major " scientific conquest " is typical of the restrictive technique. The public is lulled into believing exactly what it is told without even the hint of the existence of other equally valid, though less known, hypotheses of natural phenomena. The expanding universe theory is no exception.

The work now being done by Professor Ryle and his team at Cambridge University is obviously extremely valuable—no one in their right mind would deny it—for the results of this work may well have far-reaching repercussions. But why is it that other quite plausible theories often remain unheralded when they may be equally valid?

The temporary setback which Professor Fred Hoyle's Steady State theory experts may have suffered is just another example of the continual war of the experts. The man in the street (if he is interested at all) is guided only by the antagonist who remains standing. While the fact remains that our experts are themselves often unaware of the truth about which they fight.

The orbital cosmos explanation of an expanding universe is just another example of an unchampioned theory. Beyond any doubt the theory in itself may be found wanting; there may be found inconsistencies here and there in its completeness. But in this respect it has at least that much in common with the Steady State and Expanding Universe theories and therefore its validity should at least bear equal consideration.

The Expanding universe theory is, of course, the traditional idea of how the universe began. It holds that " in the beginning " a gigantic primæval explosion bespattered space with cosmic debris, and on this ever outrushing conglomeration of atoms life was created and has evolved.

The Doppler effect

Of course, the remote galaxies are far too distant for any movement as such to be detected by normal means, but a comparatively simple principle used in astronomical science has made this possible. It is known as the Doppler effect and was pointed out by Doppler, of Prague, in 1842. The idea is analogous to that of the alteration in pitch of a locomotive whistle as the vehicle approaches or recedes from the observer.

As the vehicle approaches the note seems to get higher and higher, reaches a constant pitch when the source is opposite, then drops down the scale

when the vehicle recedes. The same thing is frequently heard when a high-speed aircraft passes overhead, though the example of the locomotive is probably the more marked due to the better quality of the musical note.

In principle this is quite fundamental and explained by the fact that sound is caused by vibrations in the emitter, which in this case happens to be the aeroplane or the whistle. The vibrating emitter conveys these vibrations to the surrounding air molecules, which in turn vibrate the receiver, or the human ear. But the pitch of a note depends on the frequency of the vibrations. In other words if the ear drum is vibrated at 8,000 cycles per second, a higher note will be registered than would have been the case if the frequency was only 6,000 cycles per second.

The acoustical counterpart

From this it will be seen that when a note is given off by a stationary whistle—relative to the observer—an even note is registered because a constant number of vibrations are being received every second. But when the source of the vibrations is moved rapidly towards the observer, the number of vibrations catches up, as it were, and a greater number of vibrations per second is registered, which results in a corresponding rise in pitch. This reaches a maximum intensity when the source is nearest, then falls off as it recedes farther from the observer when an ever-decreasing number of vibrations is received. This, then, is the acoustical counterpart of the phenomenon known as the Doppler effect.

As the human ear is a device for detecting vibrations of varying frequencies, similarly the eye is a device for detecting vibrations of varying wave-lengths of light. And as change in frequency means change in pitch to the ear, so change in wave-length means change of colour to the eye.

Therefore, as a distant star approaches, the waves of light which it emits are pressed into a smaller space and become shorter and the ray they form becomes more refrangible.

If the distance between the observer and the start is increasing, the waves lengthen and the ray becomes less refrangible. In 1848 Fizeau showed that the spectroscope would detect such differences as varying bands of colour. It is this phenomenon which has given rise to the expression " red shift " in relation to the expanding universe theory. For if a galaxy is receding from us at very high speed, then by virtue of the Doppler effect we would expect to receive a colour image in the red end of the visible spectrum. And it so happens that this has been found almost without exception to be the case. To whatever part of the universe astronomers pointed their telescopes, the result was the same. There was a recession of the untold millions of galaxies, the milky ways of other systems were flying apart at colossal speeds. The theory is inherently an advocate for an original primæval explosion idea, and, of course, has found great sympathy among theological and philosophical circles, for it would seem to bear out the biblical assertions in Genesis.

Naturally there has been many arguments both for and against the expanding universe theory. But the most prominent objection was based on the reasoning that if the universe did in fact originate from a gigantic explosion, then we would expect to see an irregularity in the density formed by this cosmic debris which we call our universe.

Figs 1a and 1b show the development of a typical explosion. It will be seen that immediately after the initial percussion shock, the substance starts to break up and disintegrate

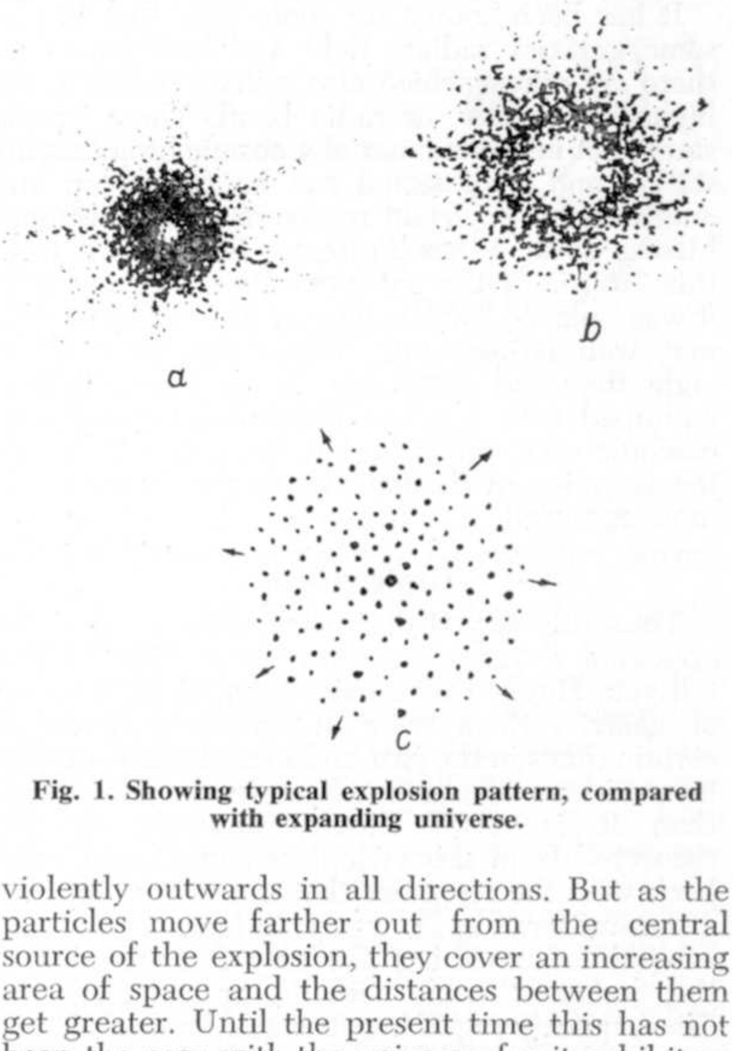


Fig. 1. Showing typical explosion pattern, compared with expanding universe.

violently outwards in all directions. But as the particles move farther out from the central source of the explosion, they cover an increasing area of space and the distances between them get greater. Until the present time this has not been the case with the universe, for it exhibits a close uniformity of " packing " as far out into the cosmos as modern telescopes can penetrate. (See Fig. 1c.)

Thirteen years ago, encouraged by arguments of this nature, Professor Fred Hoyle, together with Bandi and Gold, challenged the traditional idea of an expanding universe. Instead they suggested that the universe had no beginning, middle and end in time. They claimed that in the dark reaches of endless space new matter is continually being formed and that new-born galaxies are taking the place vacated by the old ones. Hoyle claims that, should we be able to return a thousand million years from now, we would find not an empty void, but a universe very much like the present one.

Professor Martin Ryle, on the other hand, is one of the world's most brilliant experimental radio astronomers and, equipped as he is with the world's largest radio telescope (some twenty times larger than Jodrell Bank), he is able to penetrate farther into space than anyone else. It is perhaps true to say that Ryle is the only man in a position to pronounce whether Hoyle's theory is right or wrong.

It has been known for some time that just as some galaxies radiate light and heat waves, so there are others which also radiate waves in the higher frequency, or radio band. These "radio stars" act in the manner of a cosmic broadcasting station and their signal can be picked up and amplified by powerful receivers as a continuous hissing noise. When Professor Ryle listens in to this "music of the galaxies," he is hearing it as it was "played" at the time of its broadcast. This may well be anything from three thousand to eight thousand years ago. So, in effect, Ryle is equipped with a rather wonderful kind of time machine with which he has been able to record the grouping of the galaxies as they were in remote ages past.

Hoyle v. Ryle

Thus this expert has been able to deal his opponent a staggering blow by saying "I can tell you, Hoyle, that I have counted the number of galaxies there were in certain positions at certain times in the past and I can assure you that the universe was a much more crowded place than it is now." Hoyle, however, quickly recovered from this violent onslaught and came back with the rejoinder that not every galaxy is a transmitter of radio waves; in fact, he says they amount to something like only five per cent. of the galaxies visible with the optical telescope. Then, quickly regaining strength, he dealt Ryle a counter blow, which has sent both champions back to their respective cosmological corners. For, says Hoyle, "radio stars may only transmit in their old age." While this battle rages, might we not consider a third and neglected theory?

Although the orbital cosmos theory may suffer from slight technical contradictions which may require reconciling, it is an alternative solution. But more than that, its basic concept would appear to harmonise directly with fundamental cosmic mechanics, i.e. Circular Motion. We shall be wise to bear this point in mind when considering the mechanics of the interplanetary flying saucer.

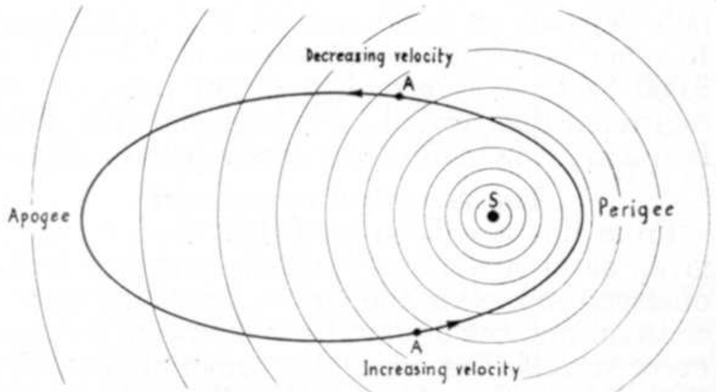


Fig. 2. Body in a Keplerlian orbit in a gravitational field.

Fig. 2. depicts a body in orbital motion about a source of gravitational influence. The increasing diameter circles represent decreasing gravitational field strength at increasing distances from S.

The orbit shown is deliberately exaggerated in order to illustrate more clearly the theory.

According to Kepler's law the circling body A will go on accelerating as it approaches the perigee due to the increasing field strength. (This is the whole crux of the matter and careful consideration should be given to this point.) Thus, having been pulled round by S, the body will have gained sufficient energy to overcome the attractive force and to recede farther outwards towards its apogee. But although during this part of the journey it is subject to ever-decreasing gravitational attraction from S, nevertheless this attraction is sufficient gradually to slow the body down and it will decelerate until finally it reaches its apogee, or farthest point from S.

Now it moves obliquely to S. Then, under continued though subdued attraction, the body slowly moves back to complete its circuit, encountering ever-increasing field strength as it does so. This, of course, increases its rate of acceleration once more towards S. This is a common elliptical type orbit and it is at this part of the journey towards S that we must temporarily halt in order to examine the orbital cosmos theory.

In Fig. 3, only that part of the orbit in which

we are interested is shown, body A and source S being as before. In this case, however, an additional two bodies are included in the orbit B, which is in front of A, and C, which follows on behind. It will be apparent that B, being nearer to S, will have a greater acceleration than A, and, likewise, C, being farthest from S, will have less acceleration than A. The situation is analogous to three vehicles moving in line on a motorway. If we were travelling in car A we would observe by the passing terrain that indeed we were moving at perhaps 50 miles per hour. And, further, by the passing terrain we would also observe that the car B in front was also moving along with us, and with an instrument might detect its speed to be 70 miles per hour. Looking back we would observe car C also to be moving along with us and might measure its speed at, say, 30 miles per hour. Therefore, in car A we would be drawing away from C at 20 miles per hour, and car B would be drawing away from us at 20 miles per hour, and we would all have something in common; we would all be moving along the motorway as shown by the passing terrain.

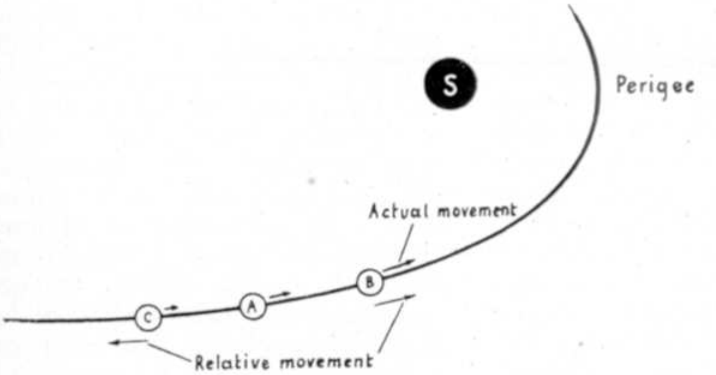


Fig. 3. Relative movement due to increase of acceleration.

However, and this is the whole point, if the motorway could be suddenly caused to vanish and we were to find ourselves still moving as before, but now in empty space, we would imagine ourselves in car A to be stationary and would therefore quite correctly say that both car C and car B were continually moving away from us at 20 miles per hour in opposite directions!

Recession would be an illusion

If we now replace the motorway in our analogy for an invisible orbit moving round an unknown centre S, and further if we exchange our cars for galaxies and assume that we exist somewhere on galaxy A, then it is easy to see that our astronomers could quite legitimately claim that galaxies B and C were receding from our own. For in essence this is perfectly accurate, but they would be unaware of the fact that this was an illusion brought about by the satellite character of the cosmos about the unknown centre.

The development of the theory now becomes a little more complicated, involving some vector analysis, but the inclusion of another two orbits in Fig. 4 will help to convey the general idea.

It will be apparent that a body near A moving on the inner orbit will be closer to S, and therefore will be subject to a greater pull; therefore, its rate of acceleration will be higher than A. Similarly a body near A moving on the outer orbit will be farther from S and will therefore be subject to a decreased pull, resulting in a lesser rate of acceleration than A. If the orbital theory is correct, this would give rise to a small relative angular movement in remote galaxies, but as the distances involved are so enormous, it is logical to assume that such movement would be undetectable, while the remaining vectorial movement away from A would show up in the spectroscope.

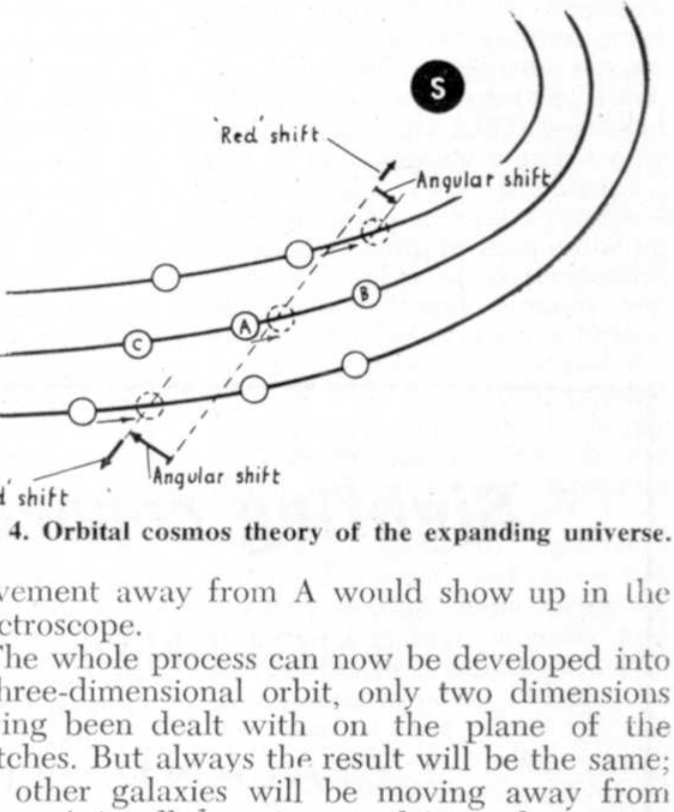


Fig. 4. Orbital cosmos theory of the expanding universe.

The whole process can now be developed into a three-dimensional orbit, only two dimensions having been dealt with on the plane of the sketches. But always the result will be the same; the other galaxies will be moving away from galaxy A in *all* directions, and in truth our cosmos is in the apogee stage.

Of course, due to the vast magnitudes involved, such a satellite system would be completely undetectable. We could not conceive of an unknown centre or source such as S about which the whole of the cosmos rotated. We can only romantically speculate. If the orbital cosmos theory is correct, could it be that this colossus is just but another cosmic galaxy, in an even greater system, on an even greater scale, and that

they in turn move about equally awe-inspiring and unknown centres? Or, indeed, is this the limit of it all?

If, indeed, Professor Ryle could acquire a wonderful time machine with which to look into the far distant future, he might find himself in the unique position of gazing at astrophysicists on an insignificant little world whose cosmos was slowing down towards the perigee stage, while proclaiming that the universe was a *contracting* one and that in the year dot it would end in a great big bang. And so on *ad infinitum*.

Sighting reports . . .

ENGLAND, SCOTLAND, NEW ZEALAND, THE U.S.A., SWEDEN and SOUTH AFRICA

. . . in this issue

BOOK REVIEW

FLYING SAUCERS: *TOP SECRET* by Major Donald E. Keyhoe, U.S. Marine Corps, Ret. (G. P. Putnam's Sons, New York, $3.95). Major Keyhoe is a fighter; he has fought for years that the truth about flying saucers be recognised; he is fighting now harder than ever and he has brought in reserves: his "Case for Congress"—his confidential reports from service sources which, without breach of security, are new and utterly convincing.

Major Keyhoe has been fighting for an investigation by Congress, with public hearings, in order to break the grip of the Silence Group in the Pentagon which has so far thwarted him. The evidence in this book indicates that the Air Force sometimes assumes an authority to which it is not entitled and, therefore, some of his best reports are from Navy sources which refused to accept its censorship; but the silence pressure may originate with the Central Intelligence Agency.

One wonders what they fear from publicity. Is it panic? Hardly, since flying saucers are widely accepted already and they have not used their superiority to attack our world. Is it military advantage? Perhaps secret, urgent effort is still going on to discover their motive power and how to control it. It may be, also, that fears arise for the economic and social structure of civilised society: what, for example, would happen to the automobile and fuel industries if the power should prove cheaply available? What control of its affairs would a nation have if its citizens obtained the ability to hedge-hop frontiers in all directions?

Frontiers! In the years leading to World War II, the *Punch* cartoon depicting a passport-less musician saying to immigration officers "I thought art knew no frontiers!" gained its humour from the forbidding meaning of those barriers which represented the crystallization of ugly situations and fear of violent action. An escaped slave could not cross frontiers. If such fears had prevailed in the past, slavery would never have been abolished; yet, those nations which fought to make slaves free stand today blessed with order and prosperity. They have forgotten that slavery was once normal and what it meant. Herodotus, born nearly 500 years BC, described how the Scythians, returning home after 28 years warring with the Medes, were opposed by a new generation born of the union of slaves, whom it was their custom to blind, with the Scythian women. Making no headway in spite of many engagements, one of them proposed: "that we should stop using spears and bows, and go for them each one of us with a horsewhip. When they saw us armed, they naturally felt that they were as good as we are, and were meeting us on equal terms; but when they see us coming with whips instead, they will remember they are slaves. Once they admit that, they will never try to stand up to us. The Scythians put the plan into action with immediate success; the opposing army was dumbfounded; every man forgot he was a soldier and fled."

Major Keyhoe is fighting for freedom from slavery—of the mind and to extend its frontiers. We salute him in gratitude for his latest book, which refreshes our courage and our determination. We hail him, in the words of Arthur Clough:

"Say not, the struggle naught availeth,
The labour and the wounds are vain,
The enemy faints not, nor faileth,
And as things have been they remain."

We fight in the same cause as Major Keyhoe, but our strategy is different. We do not think that a public admission in the House of Commons that flying saucers may be spacecraft from other planets would have much effect, if it were in advance of public opinion. Our effort has been to continue publishing FLYING SAUCER REVIEW, as a commercial company dependent alone upon our ability to reach and hold that small portion of the public which is interested.

It may be that former civilisations rose to a level where those in charge knew and communicated with people who travelled space: one of Major Keyhoe's Navy informants authenticated the Piri Reis map (see FLYING SAUCER REVIEW, Sept.-Oct., 1959, issue) as at least 5,000 years old and of an accuracy possible only from aerial survey. Incidentally, its projection—so long a puzzle—is based on straight lines radiating from a number of conveniently-placed points and reminds one of Aimé Michel's theory of Orthoteny, in *Flying Saucers and the Straight Line Mystery*, a parallel unconsciously suggested by Major Keyhoe in quoting French Air Force General L. M. Chassin's comment on "Orthoteny."

Such civilisations probably practised slavery and were not self-perpetrating democracies; or they were a weak minority and succumbed to a primitive world. This time civilisation will win; for the man in the street in the world's most powerful democracies is beginning to look outwards towards space; he is taking flying saucers seriously, despite ridicule. Good communications will bring public recognition, so long as sightings continue, but they also reveal interference with freedom of information in an attempt to prolong a form of slavery. In years to come, in our lifetime, it will be declared that Major Keyhoe's battle is historic.

—*Our Reception Committee*

THE UFO SURVEY OF BRAZIL - PART II

by Olavo T. Fontes, M.D.

Dr. Fontes here continues his detailed account of the visitations over Brazil in 1960. This article, and its predecessor which appeared in our March-April, 1961, issue, is reprinted with grateful acknowledgment to the *A.P.R.O. Bulletin* which is published from 4407, East Linden, Tucson, Arizona, U.S.A. This instalment appeared in their September, 1960, issue.

THE town of Acarau is located at the extreme north of Ceara State. At 7 p.m. on May 17, 1960, a strange green luminous sphere was observed in the northern sky. It approached at slow speed, hovered above the sea front of the town for about 30 seconds, then moved away to the south-east. Half an hour later, at exactly 7.30 p.m., a strang red glowing object approached the town from the west. As it came closer, it looked like a bright point of light (star-like), at the centre, enveloped in a kind of opaque halo. It passed over the sea, in front of the town, then stopped abruptly in mid-air. After remaining perfectly motionless for about 60 seconds, the object moved away to the east and disappeared. The sighting was witnessed by hundreds of observers from the town and surrounding areas.

If the coast of Ceara State is followed toward the south-east, a straight line starting at Acarau will pass exactly over the small town of Paracuru, ending in the suburbs of the State capital, Fortaleza. The events in the area of Paracuru were interesting for several reasons, but mostly because the UFOs involved were flying discs.

At 6.30 p.m., a farmer named Pedro Alves dos Santos was driving a herd of donkeys toward Paracuru along a dark road, with another member of his family. There was a starlit sky with no clouds. They were close to a small village called Taboleiro de Nazare, about 18 km. to the west of Paracuru (not shown on maps), when their attention was attracted to a strange phenomenon. There was a huge round-shaped craft silently following their caravan. It was a grey object with a bright blue light on top, flying very low. No sound came from it. It was a frightening spectacle, that " thing " following the caravan along the deserted road. The strange hunter tracked the group for about 18 km., always at the same distance, remaining in sight for about 20 minutes. Pedro reported the incident to the press: " I was travelling along the road, spotted that strange-looking ' airplane ' with no wings, round in shape and appearing to be motionless in mid-air—watching us. At the end, it suddenly climbed up at tremendous speed and was gone," he said.

Meanwhile, at the same moment, a fishing boat with three people aboard was moving through the quiet sea, far from the coast. The sky was clear and cloudless; anything moving across the sky should be spotted easily from a large distance. Suddenly the attention of the fishermen was called to the strange-looking dark object that was coming down on the boat, out of nowhere. It stopped at 300 feet above the boat and became motionless, emitting a strong blue glow which illuminated the boat. There was no sound. It hovered over the frightened fishermen for about three minutes, then moved away toward Paracuru.

The incident at Paracuru

At exactly 7 p.m., more than one hundred excited citizens at Paracuru watched the appearance of a strange disc-shaped craft over the town. Flying about 600 feet above the ground, at low speed, the noiseless object manœuvred over the town's main part in several directions. Once it even stopped in mid-air close to the town's church—in a strange tilted position. It was oval-shaped, almost circular, about 60 feet in diameter, and showed a smooth, polished dark-grey surface. There was a strong bluish light on top of it. After manœuvring over the town for a long time, the disc-shaped object finally moved away at high speed and disappeared. This sighting caused fear, panic and hysteria among the residents of Paracuru and the surrounding area.

Others panicked when informed about the UFO's reappearance around that town about nine hours later—and about the landing that took place on a nearby beach at 4 a.m. on May 14.

At that early hour a fisherman, Raimundo Ursulino dos Santos, was leaving his residence to go to town about 8 km. away. He spotted *two* disc-shaped objects landed on a sandy hill of a nearby beach. The strange machines were aluminium in colour, and as he approached the beach Raimundo sighted *two beings of human appearance* outside the airships, talking with each other. They were *small* and very *pallid*. One of them was dressed in a blue suit and there was a kind of translucent glass-like helmet on their heads. Then one of them saw Raimundo, who had stopped, not believing what he was seeing. The being called him with gestures. The fisherman was too frightened to obey. He turned back and ran away as rapidly as possible, yelling for help. When he came back with other men, they found only the marks on the sand at the places the two discs had landed.

At 7.45 p.m. (May 13), while a flying disc was exploring the area of Paracuru, another one was hovering quietly over the outer limits of Fortaleza. It was spotted by a military jet plane from the Fortaleza Air Force Base. The pilot, Captain Frota, tried to intercept the UFO, but the " unknown " moved away in an evasive manœuvre, at supersonic speed, and was gone in just a few seconds. The incident was kept secret by the authorities. It was not reported by the press. I obtained the information from a confidential source.

Many witnesses

At 8 p.m., a disc-shaped luminous object crossed the skies over Mombaca, Ceara. It appeared in the northern sky and was travelling from west to east. It seemed to be relatively small in size and was encircled by an eerie greenish glow. The phenomenon was watched by a large number of persons, including responsible citizens—Dr. Antonio Sisnando, Militao de Souza, Eduardo Evangelista, and many others.

There is a town called Petrolina at the extreme south of Pernambuco State, located at the northern margin of the Sao Francisco river, which marks, at that point, the frontier between the States of Pernambuco and Bahia. At the other side of the river and to the south of Petrolina, there is another town—Juazeiro—in Bahia territory. There is a very good UFO investigator living in the area; the Mayor of Petrolina, engineer Luiz Augusto Fernandez. Let us see his report about the events on the night of May 13:

" At 7 p.m., a strange luminous object was sighted in the skies of Petrolina by dozens of witnesses. Gliding silently through the sky, the UFO came from the north (or north-west) and was first seen about 10 degrees above the horizon. It was moving toward the north-east, at slow speed. It looked like a bright star encircled by a whitish mist (or cloud), which was almost circular in shape—having several other luminous points around it, not so bright. As that luminous mist approached the town it increased gradually in size, to become larger than the full moon. Then, when it was about 45 degrees to the north-east, it suddenly stopped in mid-air. The nebulous envelope vanished—remaining only the luminous points, which also began to lose their luminosity and finally disappeared into the darkness. The star-like nucleus remained in sight for a few minutes more, then was gone, just like a light that has been turned out. The phenomenon lasted for 12 minutes. The sky was clear and cloudless, and the visibility was perfect. The glow around the UFO didn't make any reflection —and this, together with the lack of noise, caused a vivid impression on all the observers. Incidentally, this was the fourth time that the passage of mysterious objects over Petrolina had been observed this year."

The same object

According to the investigation made by Mayor Fernandez, the same (or similar) UFO was sighted that night over Juazeiro; also over Oeiras, far to the north-west, in the State of Piaui; also over Bonfim, State of Bahia—far to the south. According to travellers arriving at Petrolina during the following few days, this sighting was made at 6.35 p.m. The UFO was flying along a similar trajectory; from the north, toward the north-east.

The Petrolina observation was reported in the press, which also carried reports about the sighting of similar objects, that same night, over Salgueiro and Cabrobo, State of Pernambuco.

Incidentally, a straight line running from Petrolina toward the north-east will pass exactly over Cabrobo, Parelhas and Picui, State of Paraiba, and also over Macaiba, State of Rio Grande do Norte.

The Petrolina observation was very important. It was the only one reporting the presence of small luminous " points " around the larger object. They might be smaller craft flying around their huge " mother ship "—preparing to spread out in several different directions. They might be of the disc-shaped type reported from other areas. They were not seen around the cloudy objects

sighted from other locations that night.

That same night, a " ball of fire " was seen as it passed at high speed across the skies over Caninde and Marco, State of Ceara. A huge luminous sphere was observed over a farm around Morada Nova, also over Russas, moving at high speed. The State of Ceara was the obvious centre of UFO activity that night. The fact was discussed by a Fortaleza newspaper, *A Povo*, of May 17, which published a review of 13 sightings, including the ones briefly mentioned above. They concluded: " Unfortunately it is impossible to establish the trajectory of the object because the reports received from towns distant from each other, like Crateus, Redencao, Quixeramobim and Iguatu, state that the sighting occurred at 7 p.m. On the other hand, at Quixada the time was 6.45 p.m., at Acarau, 7.30 p.m., at Campos Sales, 6.30 p.m., and 8 p.m. at Mombaca. Besides, not even the chronological sequence of sightings could be used without danger of mistakes—for the directions or trajectories along which the object was flying do not coincide. The object was travelling either from north to south, either from east to west, or from west to east, according to the location considered—and this forced us to conclude it was making zigzags across the Ceara territory."

It seems evident to us that those newspapermen had never heard about a book entitled *Flying Saucers and the Straight-Line Mystery*, by the French author, Aimé Michel.

The meaning of orthoteny

To Aimé Michel, the students of UFO science must credit the discovery of orthoteny, a term suggested by the discoverer himself to mean " stretched in a straight line." Michel found that the places from which UFO sightings were reported for a given day, when plotted on a map of France, showed a very definite tendency to lie along straight lines. When sightings for a given day were unusually numerous, a network of such alignments could be discerned. Michel also observed that those alignments tended to cross at common points of intersection, called " stars," where three or more lines crossed each other (crossing of two lines was not considered a " star "); that those alignments—or arrangements of observations on a straight line—tended also to meet and end at terminal points, called " apices," where two or more lines met and ended. Michel believes that each network for a given day has a principal nexus point where many lines crossed, and that the phenomenon reported at these principal nexus points is uniformly a big cloudy flying cigar (or cigar-shaped UFO); and, conversely, wherever the big cigar is observed standing still in a vertical position, that point will invariably prove to be the principal star of the day's network. But his more interesting discovery was the fact that the straight lines plotted on the map do not necessarily correspond to the uninterrupted trajectory of a single object: observations along a line are not as a rule arranged in chronological order (where they are the distances involved are usually short ones). Besides, the reported directions of movement almost always correspond with an orthotenic line passing through that point, from which the UFO's trajectory had been observed; for objects observed in the air, if the witnesses on the ground are not directly on the orthotenic line, they always locate the object seen in the direction of that line; for objects on the ground, they constitute the best aligned observations. Michel concluded that this phenomenon of straight-line alignments is ephemeral, seldom lasting for more than 24 hours—the " change-over point " apparently coming in the later hours of the night.

The sightings plotted

The unusual number of Brazilian UFO sightings on May 13, 1960, concentrated in the north-east, suggested a good opportunity to test the orthotenic theory. I decided to plot on the map the locations of 27 sightings reported in the press for that day (listed above), and to study the observations from the orthotenic point of view. In the absence of a gnomonic map of Brazil, I had to content myself, for the time being, with the nearest available approximation to represent the great circle lines of the earth's surface as straight lines. A map of Brazil, scale 1 : 5,000,000, of the Brazilian Institute of Geography and Statistics, on policonical projection, was used. The distortions involved, either of angles or distances or surfaces, are not too great so that the accuracy of lines drawn on this map was considered as more than sufficient for our purposes. Of course, to make a scientific study of the UFO phenomenon over larger distances, on a continental scale, the true gnomonic projection would have to be resorted to. But for an area not larger than the north-eastern region of my country this is not necessary.

In my preliminary study, only the cases reported in the Brazilian press were plotted on the map; the Fortaleza sighting was the only exception. Four observations were excluded because they correspond to very small villages (Acarape, Guaiuba, Marco and Barreira) not found on the map, all of them in the State of Ceara. There are 31 three-point alignments, four of four points, and one of five; they form a geo-

metrical pattern similar to the ones found by Aimé Michel. (See map in FLYING SAUCER REVIEW, March-April issue.) It is evident that this network of alignments confirms beyond any doubt the pattern found in the French observations in 1954. Of course, some of them might be accidental, but mere chance can never explain the geometric arrangement of the whole network. In fact, according to the studies of Alexander D. Mebane (from the Research Division, Civilian Saucer Intelligence of New York), pseudo-orthotenic patterns never show this orderly arrangement; they invariably have a jagged and irregular appearance. There can be no doubt: the pattern shown on the map is distinctly different from anything that chance could produce.

It is not necessary to discuss in detail the alignments and geometric figures drawn on the map. The reader can do it for himself on the basis of the data reported about each sighting included. Yet, it seems evident to anyone that the network established by those alignments appears to be somewhat incomplete. In fact, there are possible alignments (broken lines) which, if proved to be real, would make a much more perfect and regular network. These particular alignments are extremely important because—if the orthotenic theory is true—they can be predicted with absolute accuracy, even in the absence of the observations necessary to establish their reality. Why? For the following reasons:

1. Generally speaking, they correspond to the reported direction of movement of certain UFOs. Therefore, according to the orthotenic theory, they should correspond to real alignments passing over the places involved. If the theory is true . . .

2. The first broken line, for instance, corresponds to the trajectory of the greenish-luminous "sphere" that approached Acarau along a west-east trajectory, at 7.30 p.m. The second one refers to the UFO that came from the north, at 7 p.m., hovered above the sea in front of that same town for half a minute, then changed course and went away toward the south-east, along the straight line passing exactly over Redencao and Russas, where UFOs were spotted, too. If this three-point alignment is prolonged still more, to the south-east, it will penetrate in the State of Rio Grande do Norte and meet there, exactly over the town of Currais Novos, with another possible alignment passing over Iguatu. From this last location, at 7 p.m., a UFO was observed, flying horizontally in an absolutely straight line—from west to east. If a single carefully-made observation is sufficient to establish the exact angular co-ordinates of an alignment—then the Iguatu observation must correspond to an orthotenic line running from west to east. A fourth possible alignment is suggested by the observation at Mombaca, where a flying disc was sighted at 8 p.m., travelling from west to the east; this straight line would pass also over Solonopolis, in the direction of Rio Grande do Norte—to intersect there, exactly over the town of Macaiba, with a fifty possible alignment coming from the south-east, from Petrolina and Cabrobo; as was said before, a UFO was seen over Petrolina at 7 p.m., coming from the north along the alignment Crateus, Petrolina, Juazeiro—then changed course toward the north-east, toward Cabrobo and Macaiba. Finally, if these last alignments are real, Macaiba would be an apex for the day's network; in such a case, a sixth possible alignment might exist to connect it with Russas and Caninde, where UFOs had been observed.

3. To conclude, if the possible alignments listed above were real, the day's network would be more complete from a geometrical point of view, spreading to the east to include the States of Rio Grande do Norte and Paraiba.

As a matter of fact, the scientific value of the predictions discussed above was established beyond any doubt. *All of the possible alignments suggested were confirmed later by factual evidence.* The only exception was the west-east line ending at Acarau, not yet proved to be real. This represents a startling demonstration of Michel's orthotenic theory. It also establishes the fact that we do not need three observations on a straight line to determine an alignment: *it is sufficient to have the exact angular co-ordinates on the UFO's trajectory.*

In our next issue, Dr. Fontes, having set out all the facts in his first two articles, sums up the situation and comes to a startling conclusion.

THE PRESENTATION OF PHOTOGRAPHIC REPORTS

J. M. Adams, B.Sc., F.R.Met.S.

WE have read much about "traditional" scientists' view on the reality of unidentified flying objects, and much also on the validity of evidence that has been collected under "less than strictly scientific" conditions. Dr. Weber, in the Jan.-Feb. issue of the REVIEW, has pointed out many of the reasons why scientists hestitate to commit themselves on any aspect of a subject where reasonable control of conditions is impossible, and where admitted fraud has occurred.

But the enthusiasts who accept the existence of flying saucers often seem hurt when a scientist continues to be sceptical in the face of the so-called objective evidence provided by photographs, and for this we must blame, not the observer (who took the photograph), who is almost bound to be a layman, but the "expert investigator" of the observation, who so often presents an utterly inadequate analysis followed by a dogmatic assertion that his interpretation is correct. A scientist will always prefer to make his own, possibly inconclusive, assessment from the available information, than to accept the opinion of another who, with the best will in the world, may err in the handling of data on a subject on which he feels strongly (ref. 1).

The Jan.-Feb. issue also provides an excellent (or deplorable) example of such a report—that of Aimé Michel on the object photographed in Belgium. It is interesting to see what we get from an assessment of what is in front of us when we study the report. There are three photographs, obviously considerably enlarged. Presumably, as the order of the photographs is not known, they were taken with a roll film, not a 35-mm. camera (35-mm. film has edge numbers). We might then estimate the focal length of the lens as about ten centimetres. Working from the size and distance of the object given, we estimate that the image on the negative is about one millimetre long, and this must have been enlarged about fifteen times to give the photographs published. The grain of the photographs would support this.

The comments about the order in which the photographs were taken are confusing. If the observer states that the last photograph was taken with the object behind the vapour trail, this fixes photograph three as the last (assuming a truthful observer). That number two is said to be certainly the second indicates that the strip of film containing the negatives has not yet been cut up. If so, and if we can borrow the camera for an examination, we (if "we" are an experienced interpreter) should be able to determine the order.

The rest of the report is concerned mainly with descriptions of what has been said by experts. Such comments are not evidence; they are simply assertions. Any experts called in should be asked to sign their statements, and these statements must then be quoted in full. Unsigned statements infer insincerely held opinions and, if an expert is unwilling to sign any statement, one can only suggest finding another expert. It is true that people are likely to be cautious if they are required to sign statements, but this is no bad thing. For instance, if this author were asked to comment on the vapour trail in the photographs, he would probably content himself with photographing a vapour trail of about the same age, and presenting the photograph for comparison by readers.

Necessary details

Thus the amount of definite information obtainable from this report is small, if we work only from what is given. The reputation of the author is a guide to its validity, but it is not possible to judge the reputations of his anonymous collaborators. The frustrating aspect of such a report is that there is so much useful information that could have been included. What type of camera and lens were used? How big was the negative and how much of it was occupied by the image? Did the whole negative include the horizon? If so, we could calculate the elevation of the object, and so get an idea of its distance as well as its height. These and many other facts would have

so much increased the value of the report.

Figs. 1 and 2 show two prints from the same negative, and give an idea of what could have been conveyed. Fig. 1 shows the whole negative, including the black border resulting from the clear film surround. (As photographers will

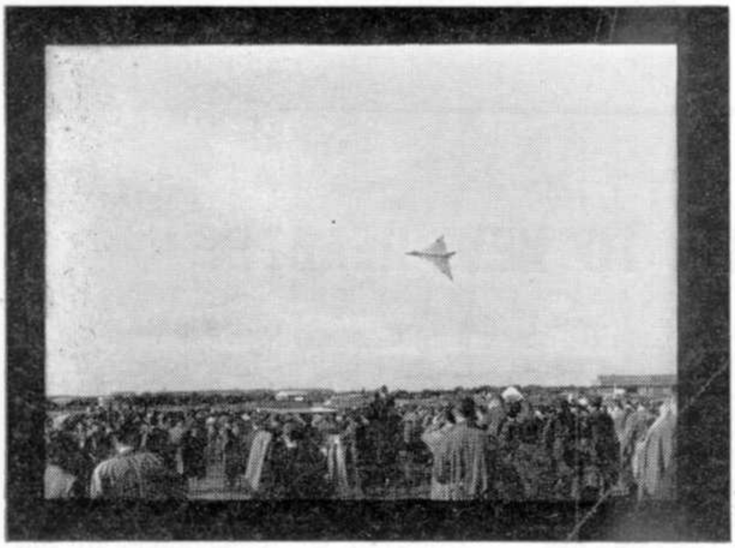


Fig. 1. Photograph of Avro Vulcan aircraft. Ensign Selfix 16-20 camera with 75-mm. Ross Xpres lens. Negative size $2\frac{1}{4} \times 1\frac{5}{8}$ inches. Length of image on negative 0.42 cm.

recognise, the black border of this picture is not in fact that due to the edge of the negative. It was not possible with the equipment available at the time to include the edge of the negative, but the edge shown was within an eighth of an inch of the true edge. This may be permissible when preparing a demonstration; it would not be when illustrating a report.) This photograph, together with the details given, allow measurements of the size and position of the image to be made, and the amount of cloud present and the weather conditions to be assessed. Such a photograph should always be included in a report. Even if the image is too small to be seen in the reproduction, its position can be indicated, and a note of the size of the image of the negative will indicate the degree of enlargement of the other print. The enlargement, Fig. 2, then allows any details visible to be assessed. In this case further facts, such as when and where the photograph was taken, can be summarised by saying that the aircraft was flying at a Farnborough air show.

It is obvious that the more information that is available the better, but below are listed the details that ought to accompany any photograph. The list is given in two parts, the first containing those items which (barring fraud) can be checked or should be remembered reliably. Items in the second part will probably depend on the memory of the observer and are likely to be inaccurately reported.

(1) " Reliable " information:
- Type of camera
- Type of lens
- Focal length of lens
- Negative size
- Degree of enlargement of print
- Was the camera mounted on a support?

(2) " Doubtful " information:
- Type of film
- Direction in which camera was pointed
- If the camera was held in the hand, was it swung to follow the object or held steady?
- Shutter speed
- Lens aperture
- Focus setting
- Filter, if used
- Were any other glass surfaces (such as windows) between the camera and object?

It may be argued that a report containing all these facts, and studded with figures, will be boring to read but, if reports are to merit serious consideration, they must be complete. If readers whose interest is superficial are to be catered for, summaries of assessments must include acknowledgments of their incompleteness and dependence on the writer's opinions, as well as a reference to where a full report can be found.

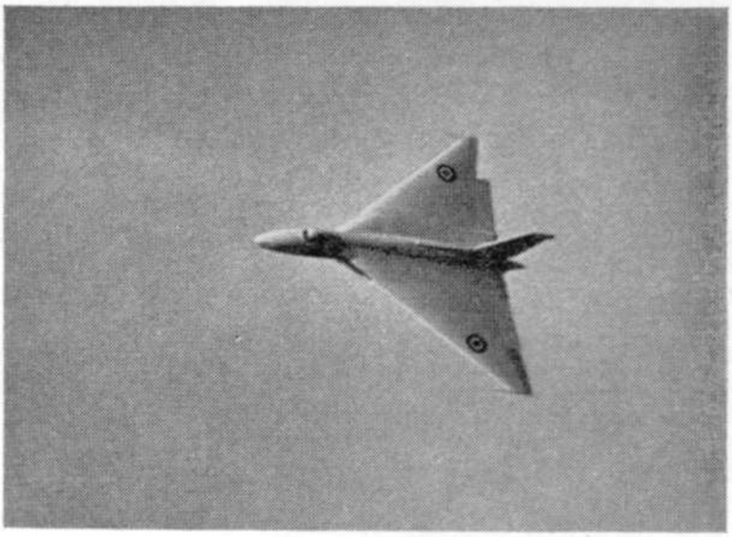


Fig. 2. Enlargement of portion of Fig. 1.

Photographs are valuable. They provide evidence uncluttered by the interpretation that is inevitably a part of any verbal description. They are, however, extremely easy to fake, and no serious investigator will consider basing an opinion on one unless he can, as far as possible, check for himself any deductions made from it.

To observers; always carry a camera. If you see anything unusual in the sky, photograph it. Then

immediately write down a description of what you have seen and the conditions under which the photograph was taken. Then take two or three photographs of your surroundings so that the situation and visibility can be assessed. And then, perhaps, we may have the basis of a useful report.

References:
Synchronicity: *An Acausal Connecting Principle,* Ch. II, "An Astrological Experiment." In *The Interpretation of the Nature and the Psyche,* C. G. Jung and W. Pauli. Routledge & Kegan Paul, 1952.

HOAXES: ANOTHER WORD TO NEW READERS

IN the March-April issue we mentioned that just recently we seem to have attracted quite a large number of new readers many of whom are, it appears, comparatively fresh to the subject of flying saucers. Once again, we ask our older and more experienced readers to excuse us if we address some words of explanation to those who are not so familiar with the history of our subject. Judging by our mail, it would appear that our previous remarks (on the subject of the secret weapon theory) were welcomed by those who were just starting to take a serious interest in flying saucers.

The hoaxer presents a very difficult and annoying problem and those who decry the subject of flying saucers as nonsense are only too ready to seize upon an obvious hoax in order to discredit all the other testimony. However, while not denying that many stupid people have indulged in hoaxes, the sceptic should be reminded that without the genuine article there can be no counterfeit. A forger does not bother to fabricate a dud currency note unless there is already in existence a perfectly good and valuable article. In the same way, the saucer hoaxer must have, at least subconsciously, assumed that real saucers exist: otherwise his hoax would not be worth the trouble. The hoaxes which have been exposed have always tried to follow the pattern of incidents that have so far proved inexplicable.

Those who are new to the subject should also be warned against accepting too readily the "hoax" explanation—it is a favourite gambit of the downright sceptic who cannot otherwise explain away a particular sighting. A number of saucer sightings have been so written off merely because some pundit has branded them as "hoaxes" without having really exposed the incidents as such. A number of contact claims have been so dismissed even by those who believe in flying saucers. One such claim has often been referred to as "an admitted hoax" without it being explained who has admitted it. Newcomers to this subject should be advised to tread very warily here: flying saucers and contact claims arouse such hostility in some quarters that the cry of "hoax" is almost instinctive to the unbeliever. Those who would investigate the subject with an open and a fearless mind should examine each incident on its own merits and without being unduly influenced by other people's opinions. The only "admitted hoax" is the one confessed to by the perpetrator: the only "obvious hoax" is the one where the impostor has committed himself, out of his own mouth, to a flagrant contradiction or to a demonstrable falsehood. The cry of "hoax" in itself is not sufficient to destroy a claim.

World round-up

of news and comment about recent sightings

ENGLAND:

Sussex Mystery

According to the Brighton *Evening Argus* of January 5, a mysterious shining object, travelling at fantastic speed, flashed in a great arc past the Sussex coastline at dawn. Auxiliary coastguard Mr. Albert Morris, perched in his lookout tower at the entrance to Shoreham Harbour saw the light at 7.14 a.m. He managed to focus his binoculars on it. It was due south and it disappeared in a position nearly due east only four minutes later. In that time it had covered a quarter of a compass. This put the speed of the object at thousands of miles per hour.

Mr. Morris said that visibility was almost unlimited. There was no cloud. The light could not possibly have been an aircraft. It was as bright as a very bright star and extremely high.

The *Evening Argus* concludes its account by suggesting that a possible explanation was that the object was a satellite circling the earth. If so, then it was certainly going very fast. If Mr. Morris is to be believed, it was going much faster than the fastest so far claimed by either the Russians or the Americans. It is interesting to note, however, how the " explanations " keep up-to-date with current events. Weather balloons are giving place to satellites as a means of conventionalising the inexplicable.

Hull Riddle

The *Hull Daily Mail* of January 14 reported that a 15 year old amateur astronomer was studying the sky on the previous night when he saw a " hazy blur of light " travelling across the skies at a fast speed. Terence Borrows, of 89 The Garth, Cottenham, who spends a couple of hours most nights watching the stars, saw the blur of light at 7.57 p.m. and took out his newly acquired telescope to investigate.

There were, he said, five discs, one of which " branched away at a tremendous speed." " They appeared as though travelling from the direction of Cottingham to Anlaby," he said, " but they were going so fast that I don't think they could have been aeroplanes." In spite of this very sensible observation, another Hull amateur astronomer, who hadn't seen the objects, weighed in with his " expert " opinion. Dr. W. Cameron Walker, headmaster of Kingston High School, said the discs could have been American or Russian satellites, but the most likely explanation was that they were aircraft flying very high and fast. His final words are worth quoting, for they indicate that Dr. Walker did not really believe what he was saying: " It seems that rays from the setting sun could have caught these aircraft and reflected the light back to earth. But it must have been very difficult to see this through a telescope." But not too difficult to see through the Doctor's anxiety to explain the whole incident away.

Evidence from many counties

The London *Sunday Telegraph* for March 5 announced that " an unidentified flying object, described as large and white, was reported seen yesterday from Northamptonshire, Hertfordshire, Buckinghamshire, Oxfordshire, Wiltshire, Gloucestershire and Somerset. The Meteorological Office and the Air Ministry could give no explanation." (The incidents occurred on the night of March 4.)

The *Sunday Dispatch* of the same date, however, describes this series of incidents but says that the Air Ministry had explained the object as a large meteorite breaking up.

Our information is that the object was seen in at least eight counties, not seven, and that Hampshire should be added to the list. The meteorite explanation would appear to fail when applied to the reports which were printed in the *Portsmouth Evening News* of March 4. One eye-witness described the object in the sky as " large and white and like a rocket." A Portchester woman said it was " brightly lit and floating slowly across the sky.

Mrs. Barbara Bowler of Portchester, another eye-witness, reported: " On Thursday night (March 2) I saw the object at Hambledon. It was very bright and it was moving very slowly towards Portsmouth." On March 3 she saw it again: " I looked out of my window at home. . . . I was fascinated by it because it was so very bright. . . . It looked to me like a huge electric light bulb. It was still visible an hour-and-a-half later, though it was getting dimmer all the time. Then eventually it disappeared into the distance. It could not possibly have been a star. It was too bright, and it stayed in my vision when all the stars were obscured by cloud."

(Credit to Miss J. D. Losack.)

Lancashire, too, can claim to have seen the object. The *Liverpool Echo* of March 4 prints the

account of a Liverpool tanker driver, Mr. C. O. Davies of Woolton, one of several people who reported seeing a brilliant bluish white light in the sky. Mr. Davies's account reads as follows: "I had just come out of Pipegate on my way to Stafford when I saw the light coming straight at me. I ducked instinctively and it passed over my tanker and landed in a field on the right-hand side of the road. Then the light went out."

(Credit to Mr. R. A. Rawlinson.)

SCOTLAND:

Aberdonian Saucer

Both the Aberdeen papers, the *Evening Press* (January 21) and the *Press and Journal* (January 23) gave prominence to the sighting reported by Mr. Hugh Lamond and his wife. Mr. Lamond, who lives at 88 Great Western Road in the Mannofield area of Aberdeen, first spotted the object at 7.10 a.m. on January 21. He said that he saw it as soon as he left the house. "It was quite dark at the time and the 'thing' was burning so brightly that it cast a light over the area. It twirled round for about fifteen minutes, and I called my wife to come and look at it. It was multi-coloured and I should say about 800 feet up. From the distance it looked 8 inches wide. It was bright enough to blind anyone if it had been closer." The object was oval shaped and the Lamonds continued watching it until a cloud obscured it from view.

Corkscrew

The London *Daily Express* of February 28 reported that three ships and a plane searched the day before for a mysterious object which, said Skipper Harold Harrison of the Fleetwood trawler *Boston Gannet*, "corkscrewed" over his vessel emitting smoke off Loch Snizort, Skye, and crashed in the sea. He thought it might have been a plane, but nothing was found and the search was called off.

Tiree Mystery

Much speculation, if not anxiety, has been caused locally by a strange happening in the early hours of Friday, February 10. While tending animals at his place in Balure, Balephuil, Mr. Alasdair Brown saw a bright white light come steadily down from the sky to crash a short distance away on the side of Hynish Hill. It travelled against the wind and despite the prevailing rainstorm the object burned brightly for two hours after landing. Next day the earth was seen to be burnt right through to the rock. The police were at once informed and promptly made appropriate note of particulars.

Absence of blast or sound precludes the likelihood of the meteorite explanation and there is general relief that the burning was clear of buildings or stackyards. Opinion favours the disintegration or misdirection of some satellite and the news that other Argyll areas were affected has added to the mystery and to the desire for some solution.

This account has been taken from the *Oban Times* for February 13 and we are grateful to Mr. Lionel Leslie for having sent it. We hope that the authorities will have carefully studied the ground affected, but, as in the case of most mysteries of this sort, we do not hope for any official pronouncement.

SOUTH AFRICA:

Saucer over coast

The following report is taken from the *Sunday Tribune* (Durban) for January 15:

"Those 'flying saucers' have been seen again, and the latest reports flooding into the *Sunday Tribune* office are of 'a bright white light' sighted over the coast about 9 p.m. on Friday (January 13). South coast residents claim to have seen the light every night since Thursday. It travels steadily from the south-west and vanishes over the sea. Only once has it been seen to hover. Mrs H. F. Puttick, of Park Rynie, said yesterday that it looked like a dim star and from time to time it appeared to release a 'halo of smoke'. It arrived an hour later every night.

"Two visitors from Green Point Cape, Mr. and Mrs. L. Saddler, were driving past the Virginia Airport about 8.45 on Friday night when they saw what appeared to be the lights of a moving aircraft. When they stopped the car, the light stopped, too. It looked like a large star, they said. It moved off over the Berea at a height of about 500 feet, and remained stationary for about 35 minutes before it came down lower to disappear in a southerly direction."

NEW ZEALAND:

Sea mystery

The Dunedin *Evening Star* for January 4 reported that three rockets or flares, estimated to have been fired from a point 10 miles out to sea from Bobby Head, opposite Palmerston, on the night of January 3, completely puzzled the shipping authorities and the police.

The sighting was first reported at 9.25 p.m. by the Master of the m.v. *Kauri* which was then three miles off Taiaroa Heads. The *Kauri* searched unavailingly for an hour and a half in choppy seas whipped by a powerful easterly wind.

All shipping and small craft were accounted for at nearby ports and the Search and Rescue Administration was alerted.

The master of the *Kauri* was positive as to what he saw and reported immediately to the Dunedin Harbour Board authorities. It was at first thought that the rockets — if such they were—had been fired by the fishing launch, *Aloha*, which had been due to leave Karitane at 8.30 p.m. for Moeraki and Timaru, but it was discovered that the launch had not put to sea because of the rough conditions.

N.A.C. pilots were then alerted, but none of them was able to report anything unusual, though visibility was not good. Captain Champion, the master of the *Kauri* finally decided that there

was no suitable explanation. "Perhaps it will just remain one of the mysteries of the sea," he said.

The *Evening Star* for January 4 also reported a mysterious object. Mrs. E. M. Harmon of Nelson Street, saw a moving light which she at first took to be a falling star—except that it was not falling. It was moving steadily across the dark sky on a straight line from west to north. It was completely orange and seemed to be moving quite slowly, said Mrs. Harmon. She added: "It was shaped like a cigar—or like one of those long balloons children play with, and it was completely noiseless." The object was visible for about a minute.

(From cuttings kindly supplied by Miss V. E. J. Allan of Dunedin).

U.S.A.:

Sky flash over Maine

Reports of a mysterious flash of light in the sky, accompanied by a loud, thunder-like noise, early on the morning of Sunday, February 5, baffled police and Air Force officials in the State of Maine. No one has been able to identify this object in the sky which some reports said "lit up the countryside like daylight."

It was seen, according to the State Police and the Federal Aviation Agency, from Bath, Rumford, Waterville, Bangor and parts of eastern and north-eastern Maine at about 2.45 in the morning. According to Associated Press, Dow Air Force Base officials said they had no explanation of the light since no Air Force craft were involved. It remained a mystery to numerous state troopers out on patrol and to residents in various Maine communities.

The State Police at Augusta described the phenomenon as "a large burning object with a blue flame coming from the tail."

That the mystery was taken seriously can be gathered from the fact that the Civil Defence Headquarters in New York phoned the local State Police at 3.15 a.m. on Sunday morning for information.

Later, a belated report came in from Brunswick that on December 28, 1960, at 3 a.m. an object was sighted coming in from the ocean. It was at least 5,000 feet in the air and it travelled at a moderate speed. The report continued: "It was illuminated in colour and at a distance looked the shape of a football. When it was directly overhead it was perfectly round and very large in size. It moved up and down. This object had green, yellow and red lights pulsating in the form of a flashlight beam from it. It was able to hover like a helicopter or move horizontally at an unbelievable quickness."

After much speculation, an official at Portland Municipal Airport "explained" the original mystery as being merely planes refuelling in flight. This brush-off not unnaturally led to indignant protests from eye-witnesses who pointed out that the evidence was in direct conflict with the explanation as offered and reminded the local paper that the report of the incident on February 5 included a "loud, thunder-like noise." However, direct evidence has never deterred "officials" from offering their untenable explanations.

(Report condensed from the *Waterville Morning Sentinel*, issues for February 6, 8 and 10, kindly supplied by Mr. Welton P. Farrow.)

SWEDEN:

Gold object

Our reader Mr. Roland Persson, of Stockholm, has sent us the following account of a recent sighting: "I am writing to tell you that on my way to work on February 12 I saw a flying saucer. I was sitting in the train, looking out of the window, when I saw this UFO. It was flying at a low altitude and then flew slowly to a higher altitude. The colour was, as I could see, like gold and (it) had a gold flash after it. It stood almost stationary and then it moved out of sight. I reckon the time I saw it (was) about 25 seconds. The place where I saw it was between Skarmabrink and Gullarsplan, on the south side of Stockholm."

RUSSIA:

Flying apparatus

Marvin Kalb, writing in the *Sunday Times* on March 5, refers to the *Pravda* denunciation of flying saucers fully reported in our previous issue. He adds, however, some fresh information. He claims that stories of flying saucers began in Russia in 1959 and included a claim by a Polar scientist named Murashov to have taken a photograph of a "strange object of unusual form." It seemed, the account continued, as though it were "some fantastic flying apparatus."

The Russian Embassy in London has been contacted on our behalf in an attempt to secure a copy of this photograph and if one can be obtained it will be printed in a subsequent issue.

PAPUA: A LETTER FROM THE ROYAL AUSTRALIAN AIR FORCE

DR. BERNARD E. FINCH, a regular and valued contributor to the FLYING SAUCER REVIEW, has written to the Directorate of Air Force Intelligence in Canberra concerning the amazing events in Papua in 1959 and has drawn the attention of the Royal Australian Air Force to Father Gill's testimony as supported by numerous witnesses. Dr. Finch has received the following reply from Squadron Leader F. A. Lang:

" Dear Doctor,

I regret that I am unable to provide any of the details requested in your letter, dated November 15, 1960. My investigation of the report by the Reverend Gill of unidentified flying objects in the Boianai area of New Guinea failed to reveal any evidence that they were manned vehicles. After examining all available facts, I concluded that the sightings were either known planets seen through fast-moving cloud, or meteorological phenomena.

As, during the course of my studies of this subject, I have been unable to find any proof that any of the objects sighted were manned vehicles from this or any other planet, I am particularly interested in the photograph* which you possess. I would be grateful if you could provide me with a copy.

For your information, I am enclosing a spare copy of the Reverend Gill's report, together with a covering letter from the Victorian Flying Saucer Research Society.

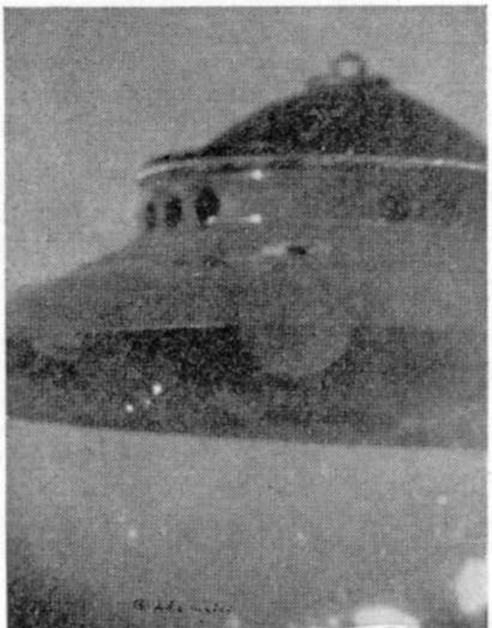
Yours faithfully,

F. A. LANG,

Royal Australian Air Force, Canberra."

This letter was undated, but was received by Dr. Finch about the middle of December, 1960. So far there has been no acknowledgment of the photograph which was sent almost immediately on receipt of the request.

PHOTOGRAPHS



The following photographs are available in half-plate size at 1s. 6d. each (post free). Complete set of 10 for 15s. (post free).

1. Venusian scout ship photographed by G. Adamski, December 13, 1952.
2. Venusian scout ship rising, showing underside details. Photographed by G. Adamski, December 13, 1952.
3. Flying saucer over New York. Photographed by August Roberts on July 28, 1952.
4. Mother ship releasing scout craft. One scout has begun to leave.
5. Mother ship releasing scout craft. Two scouts have taken off.
6. Mother ship releasing scout craft. Five scouts have left the ship.
7. Mother ship releasing scout craft. Six scouts are now to be seen.
8. Giant carrier ship photographed at 7.58 a.m., May 1, 1952, by G. Adamski.
9. Submarine type space ship, photographed March 9, 1951, by G. Adamski.
10. Space ships photographed near the moon, May 16, 1951, by G. Adamski.

When ordering please give numbers of photographs. Send order with remittance to FLYING SAUCER REVIEW, 1 Doughty Street, London, W.C.1, England.

Before making any detailed comment upon this extraordinary letter, it would be as well to consider the possibility that Squadron Leader F. A. Lang is absolutely sincere in what he believes and in what he has written. Others may like to interpret the reply in terms of a world conspiracy of silence. The comments that follow, however, are based on the assumption that the letter is sincere.

Squadron Leader Lang refers to Father Gill's report, so presumably he has read it. In the next breath, however, he says that after examining all available facts (which must include Father Gill's report) he concluded that the objects seen were planets in fast-moving clouds or " meteorological phenomena," whatever they may be. He also says that he has found no *evidence* that Father Gill saw a manned vehicle. Now that is just not true: Father Gill's report refers very clearly to a manned vehicle, though he hazards no guess as to where it came from. Squadron Leader Lang refrains from calling Father Gill either a fool or a liar, but in view of his own precise words he has left himself very little room in which to manœuvre out of such an accusation. The report which he refers to is most certainly *evidence* and nobody, least of all Father Gill and his witnesses, have offered their version of what was seen as *proof* of anything. Incidentally, an impartial judge would have to admit that the evidence was of the highest quality; Father Gill's character has never been in question and he was able to invoke the support of a number of other witnesses.

Squadron Leader Lang goes on to say that he has never found any tangible proof that any of the other objects were manned vehicles. But nobody has suggested that he—or anybody else, for that matter—would be able to find it. Father Gill's object flew away with the men in it, leaving not so much as a pair of braces behind. And nobody has suggested that Father Gill had ever offered any proof. All we can suggest as a solution to this puzzling letter is that Mr. Lang cannot distinguish between evidence and proof.

What this official letter reveals is, we think, the " will-not-to-believe " in its official guise. This type of boneheadedness is found in ranks above those of Squadron Leader and it is quite possible that the terms of the letter were dictated from higher up. However, we think that in any case its writer owes an apology to Father Gill and his mission boys.

We are sending to Squadron Leader F. A. Lang a copy of this issue of the REVIEW and we are directing his attention particularly to these remarks. We shall gladly publish any reply he may care to make. He might like to address himself to the problem of how a circular, solid craft with human pilots illuminated by a shaft of light can possibly have resembled any celestial body, however ingeniously conjured up by a Squadron Leader in Canberra. Also, has Mr. Lang interviewed Father Gill face to face? If not, what sort of investigation did he conduct?

* Photograph taken by Radio Officer Fogl, originally reproduced in the Jan.-Feb., 1959, issue of FLYING SAUCER REVIEW. It resembles the object described by Father Gill.

HOW FAR INTO SPACE?

BY W. SCHROEDER

WHENEVER the subject of space travel is under discussion, we no longer ask: "Is it possible?" No, that is taken for granted already, and the only thing about which we are in doubt still is the time it will take us to reach a given destination in outer space.

The results which have been achieved so far only point to the fact that it is just about as much as we can do to get a spaceship out into space, let alone land on another planet or even return to earth. The reason for this is the inadequacy of our rocket motors which, for purely technical reasons, cannot be improved to any appreciable extent and so the ultimate performance of a space rocket can be improved only if we make use of multiple-stage rockets which have an enormous initial weight in order to get a small payload of a few tons into outer space.

If we consider a single-stage rocket, we can assume that its motor is capable of accelerating the rocket continuously until the fuel is consumed. If we neglect the influence of the earth's gravitation, this rocket would reach a certain speed, which, for the sake of convenience, is called the "characteristic velocity." For reasons which lie in the materials for the construction, and the fuels at our disposal, we cannot possibly build rockets which have a characteristic velocity much in excess of about 3 miles per second.

In order to get an artificial satellite into orbit, we must achieve a characteristic velocity of 5 miles per second, and this can be achieved only if we make use of the principle of the step rocket. The booster stage of this achieves, perhaps, 2 miles per second, and the second stage adds another 2 miles per second to this, so that the final and smallest stage has a comparatively easy job, and its power reserve can be used to steer the satellite into its correct orbit.

From this we can see clearly why all our space probes and artificial satellites have been launched with the aid of three-stage rockets. In the case of the space probes, however, a characteristic velocity of 7 miles per second is necessary, as they have to escape from the gravitational field of the earth altogether. But even this can be achieved with three stages only. The energy content of the fuels at our disposal is such that a space probe weighing one ton requires a rocket which has a starting weight of at least 150 tons, and for practical reasons this will have to be almost doubled, or the first stages would be too flimsy to be reliable.

The escape velocity

With all this we come to the conclusion that a spaceship weighing one ton must be launched by a rocket weighing 250 tons, in order to reach a characteristic velocity of 7 miles per second, which is necessary to escape from the earth's gravitation and this speed is also called the earth's escape velocity.

If the spaceship wants to land on the moon, its rocket motors must be able to break the fall, and the power which is necessary to achieve this is the same as that which would be necessary to impart a characteristic velocity of 1.48 miles per second to the ship. This is the same speed which is necessary to escape from the moon. A spaceship, therefore, which is designed to start from the earth and land on the moon without crashing must have motors which are powerful enough to develop a characteristic velocity of 8.48 miles per second (7 miles per second plus 1.48 miles per second).

Table 1 gives the escape velocities for other members of our solar system and by adding the escape velocity of the earth to one of the others we can get an estimate of the power required to land there. We have seen already that a characteristic velocity of 7 miles per second requires a mass ratio (ratio between starting weight of rocket and payload) of about 200, and for single journey to the moon, which requires a characteristic velocity of 8.48 miles per second, the mass ratio has to be 300.

In order to effect a return journey, we must double the characteristic velocity of the rocket, and when we take into account the limitations which fuels and materials impose on us, we find that the most efficient rockets using chemical fuels, which we can ever hope to build, will develop a characteristic velocity of less than 30 miles per second.

Table 1

	Miles/second		Miles/second
Mercury	2.7	Jupiter	37.3
Venus	6.5	Ganymede	2.8
Earth	7.0	Saturn	22.1
Moon	1.48	Titan	2.7
Mars	3.2		

Escape Velocities of various members of the Solar System

A journey to the moon is no doubt quite possible, and even some of the planets could be reached. But in the case of the planets another factor comes into play. It is not just a matter of escaping from earth and landing on, say, Venus. We also need a certain amount of power on the way. In order to understand this, let us have a look at Fig. 1.

We assume that the orbits of both the earth and of Venus are circular, and that the spaceship has escaped from the gravitational field of the earth. But now it still remains on the same orbit as the earth, travelling around the sun with a speed of 19 miles per second. If we want to make the spaceship follow the dotted ellipse we must slow it down a little, so that the attraction of the sun forces it in the designed path. Here it will gradually gather speed, as its distance from the sun diminishes, until the ship reaches point B, where the orbit of the spaceship touches the orbit of Venus. If we have timed the start correctly the planet Venus will be near point B when the spaceship reaches it, but the speed of the ship will be greater than that of Venus, and now we need further power in order to decelerate the ship until the two speeds are equal.

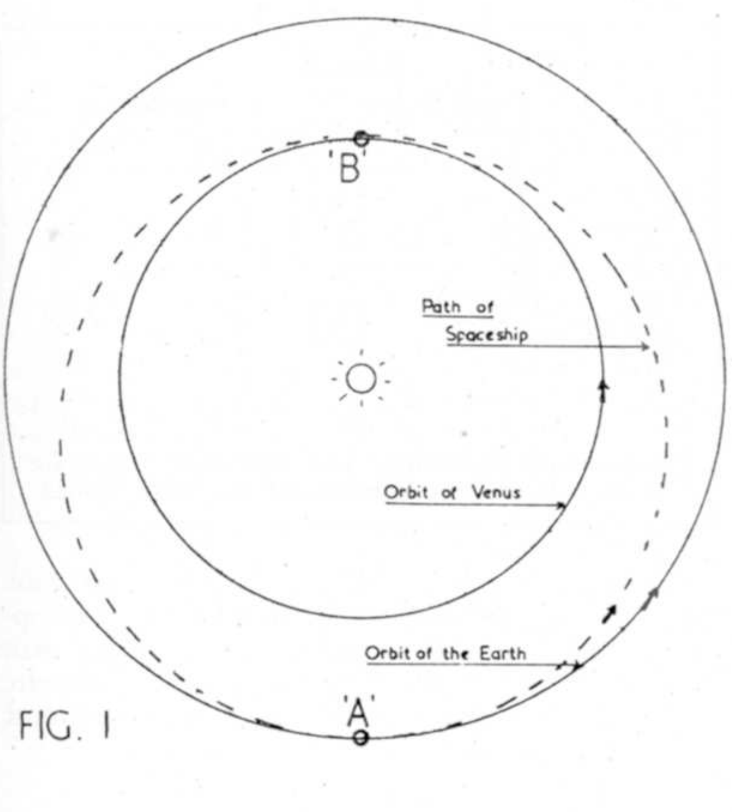


FIG. 1

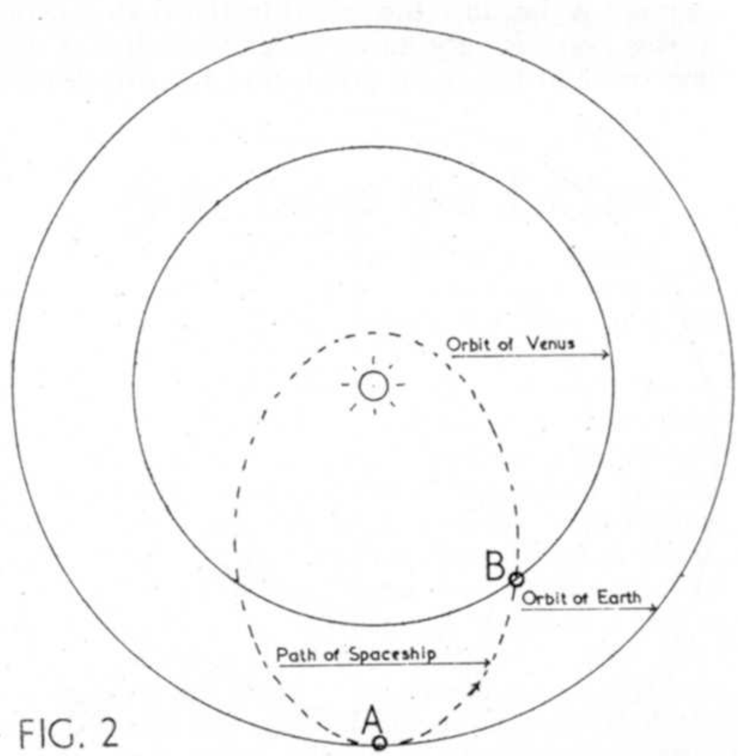


FIG. 2

If we neglect the presence of Venus, the spaceship would simply revolve around the sun in the orbit of Venus, but as we have assumed that Venus has reached point B at the time when the spaceship arrived there, a landing can be made, and for this the motors must develop power which is equivalent to a characteristic velocity of 6.5 miles per second. Because of the two bursts of power, one after escaping from the earth at point A and the other before landing on Venus at point B, the total power required equals a characteristic velocity of 14 miles per second.

In this particular case the extra power required is fairly small, and so it is for a journey to Mars, but for other targets it can become almost as large as the power needed for the starting and landing itself.

We could have reached Venus within a much shorter space of time, if we had chosen a different orbit for the spaceship, as it is shown in Fig. 2. Here we must expend a great deal more power

at point A, because the speed in the dotted orbit at this point is very much lower than that of our first orbit in the same point, and for this reason

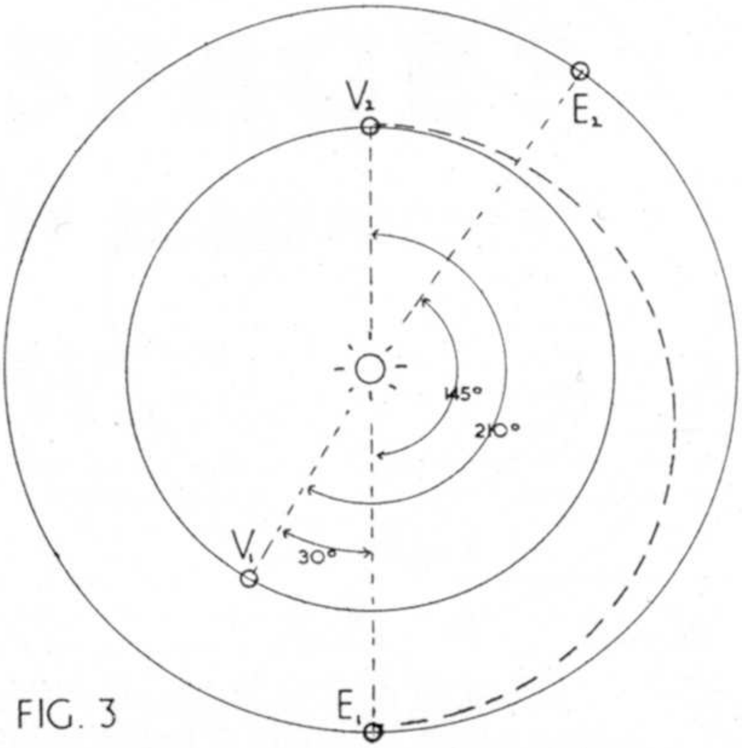


FIG. 3

the ellipse becomes much narrower. It cuts the orbit of Venus at B and, obviously, the spaceship will cover this distance in a fraction of the time it needed in the first example. But now the ship must not only reduce speed at B but must also alter its course in order to match the orbit of Venus, and again a great deal of power is necessary to effect this. In the most extreme case we shall need three times the power necessary for escaping and landing in order to get the spaceship into its own orbit at A and then into the orbit of Venus at B.

The simple formulæ of celestial mechanics tell us that a journey to Venus in the manner shown in Fig. 1 takes 146 days, whereas this is cut down to about 60 days in the most extreme case of the second example. As the spaceships which we may build some day will have very little power to spare, we shall from now on consider only journeys made in the manner of Fig. 1, which is the most economical way.

The journey to Venus must be carefully planned, because only once in every 19 months are conditions such that it is possible to send a spaceship there. This is shown in Fig. 3. The relative positions of the Sun, Earth and Venus must be such that at the time of the start of the spaceship the Earth must be 30° ahead of Venus, as indicated by the position E_1 and V_1 in the diagram. After 146 days the spaceship will have reached the point V_2 and Venus, too, has reached this point, covering 210° of her orbit during this time, while the Earth has covered only 145°, and has reached the point E_2.

Similar conditions are necessary for the return journey, and the space travellers will have to spend 15 months on Venus before they can set out for home, because not until then are the Earth and Venus in such positions that the ship, after leaving Venus, will meet the Earth in the point where the orbit of the ship meets the orbit of the Earth. A return journey to Venus, therefore, must last 2 years and 1 month, and the characteristic velocity of the rocket capable of making the trip must be 27.5 miles per second.

Table 2 gives all the data for various journeys in our Solar System. Here we find the time and the characteristic velocity for single and for return journeys to the various planets and their satellites.

This table makes it quite clear how severely we are handicapped as long as only chemical rockets are at our disposal for the propulsion of a spaceship. As far as time alone is concerned, we should be able to reach the Moon, Mars and its satellites, Venus, Mercury, Jupiter and its satellites, and perhaps even Saturn and its satellites. But if we take into consideration the fact that we shall never be able to build chemical rockets which develop a characteristic velocity in excess of 30 m./sec., we find that the only possible targets for our spaceships are the Moon, Mars and its satellites, Venus, Mercury and possibly the satellites of Jupiter and Saturn.

Table 2

From Earth to	Single Journey: Characteristic Velocity mls./sec.	Time yrs.	Time days	Return Journey: Characteristic Velocity mls./sec.	Time yrs.	Time days
Escape	7.0					
Moon	8.5	—	4	17.0	—	8
Deimos	9.4	—	258	18.7	2	240
Mars	10.8	—	258	21.7	2	240
Venus	13.9	—	146	27.8	2	30
Mercury	14.9	—	105	29.8	—	235
Titan	15.2	6	30	30.4	13	0
Ganymede	16.2	2	245	32.4	5	350
Pluto	17.6	45	275	35.4	92	0
Uranus	23.5	16	20	47.0	33	0
Neptune	25.0	30	255	50.0	62	0
Saturn	33.3	6	25	66.6	13	0
Jupiter	48.2	2	245	96.4	5	350

Characteristic Velocities and travelling times for journeys to various members of the Solar System

Fortunately this is not the end of the tale. Other means of propulsion are under development, and it may be possible that one day man will reach the farthest corner of the Universe. But the way in which this can be achieved must remain the subject of a future article.

Obituaries

Arthur Constance

WE regret to announce the death, in Cheltenham on March 15, of Arthur Constance, who used to write regularly for the FLYING SAUCER REVIEW. He was a man of many parts and was well known as author, broadcaster and competition expert. Among his published works was *The Inexplicable Sky* (1957), which surveyed a whole range of mysterious sky phenomena and established him as an expert on flying saucers on both sides of the Atlantic. This was followed by *The Impenetrable Sea*, a companion volume on the unsolved mysteries of the oceans.

Perhaps his greatest work, however, was *The Glazier* (1956), a study of his father's struggle against adversity. Set in Cheltenham, this biography revealed a great intensity of feeling and sympathy for his misunderstood parent's sufferings: Arthur Constance explained that he wrote the work " in the white heat of remorse " in order to vindiate the memory of a man he felt he had cruelly misjudged. *The Glazier* was greeted with a chorus of very high literary acclaim, though it was admitted that the book might have to be rediscovered by a subsequent generation before it could be fully recognised as a minor classic.

Captain Edward J. Ruppelt

WE regret to announce the death of Captain Edward J. Ruppelt, former head of the United States Air Force Project " Blue Book." His book *The Report on Unidentified Flying Objects* was considered by many to be one of the very best on its subject. It shows quite clearly that the American Air Force's attempt to ridicule flying saucers was deliberately inspired and led to many absurdities and contradictions. Last year, however, a second edition of this book appeared in America with three added chapters which tended to debunk the UFOs. This strange reversal of a carefully considered opinion seemed to many to have been prompted by pressure from the authorities.

We believe that in some quarters Captain Ruppelt's death is also being ascribed to mysterious causes, but our information is that he was in very poor health for some years and that his death was not wholly unexpected.

A note from the Editor

IN our January-February issue we thanked all those readers who had introduced new subscribers. The good work continues and we would like to offer our renewed thanks.

A number of our readers have written to ask whether it would not be possible to gain a wider circulation if we were to distribute the REVIEW through the bookstalls. The suggestion has, of course, occurred to us but there are serious obstacles in the way of that desirable end. Without entering too much into the technicalities of publishing, we would like to explain that this is a very costly way of reaching the public. The expense of this form of distribution can reach as much as 50 per cent. of the selling price of the magazine besides adding to the administrative charges. In other words, we could distribute through the bookstalls only at a loss.

It may be asked how other magazines manage to appear on the bookstalls at a reasonable price. The answer to this is because of the advertising revenue. Unfortunately, flying saucers as a subject does not appeal to any vested interests—at the moment, at any rate, it would appear to antagonise them—so we cannot look for any solution to our problem in that direction. Indeed, the main reason why we have survived into our seventh year is because we have remained largely on a subscription basis. This is also why we are so grateful to the majority of readers who have remained faithful to us and who have also brought the REVIEW to the notice of others whom we could not otherwise have reached.

APOLOGY

In our March-April, 1961, issue we printed an article by Dr. B. E. Finch entitled " The Under-Carriage." By an unfortunate oversight the photograph taken by Radio Officer Fogl was printed upside down. The " legs " should, of course, have been on the under-side of the object as photographed.

A SATELLITE THAT MISBEHAVED

Weymouth man puzzled

WE print the account that follows exactly as it appeared in the *Sunday Telegraph* for March 12:

"An amateur astronomer at Weymouth, Dorset, believes he has photographed a Russian space satellite that went out of control. He took his pictures with a home-made camera, made from plywood.

"He is Mr. William Smith, 62, of Hillcrest Road, Weymouth. He works as a scientific assistant at the Admiralty's under-water weapons establishment at Portland, and is a fellow of the Royal Astronomical Society and a member of the Royal Astronomical Association.

"The mystery began last August 22. On that date Mr. Smith, who often goes into his back garden with his camera at night, set up his equipment to photograph an American satellite.

"He photographed a point of light. But, he says, it was moving in the opposite direction to that of the American satellite. He was puzzled. The British Astronomical Association, he says, thought it must be the American satellite that he had photographed.

"But he waited to see what other observers might report. To his surprise his appeared to be the only pictures of the 'unidentified object' taken in Europe.

"But now, says Mr. Smith, he has received from Long Island, New York, similar photographs to his own. And the Americans have established that the 'object' was definitely not 'one of theirs.'

"Yesterday, Mr. Smith said that his findings were being passed to the United States Air Force's surveillance control centre. He had been asked to keep the Americans informed of his future observations."

Although the report does not specifically say so, as Mr. Smith heard from an address at Long Island, New York, it is safe to assume that he had received a letter from the Grumman Aircraft Corporation, whose tracking photograph appeared in our January-February issue in illustration of an article on unidentified satellites by Gordon W. Creighton. In order to shed further light in dark places, we have sent Mr. Smith a copy of this issue and have drawn his attention to Mr. Creighton's article. We think, however, that the story illustrates very convincingly the state of public opinion in England on our subject and the true nature of the opposition we have to face.

We do not know whether Mr. Smith was a believer or not in flying saucers. From the evidence of the above report, however, he would appear to be one of the large majority which does not take them seriously. Imagine his astonishment, then, when his camera records an object which is clearly misbehaving: it is going in the opposite direction to that of the American satellite. In spite of this misbehaviour, the British Astronomical Association still believes it must be American. This it could only be, of course, if the Americans had invented some device whereby their satellites could go into reverse in obedience to some whistle from Washington. However, in spite of the views of the British Astronomical Association, the Americans disown the wretched object. So poor Mr. Smith—his object spurned by the Americans—is obliged to look to Russia as the father, in defiance of the fact that *all* earth-launched satellites travel in the west-to-east direction. What Mr. Smith finally believes is a matter for conjecture — perhaps he will blame his camera or his eyes or anything rather than admit that he has recorded yet another mystery of the skies. His mental processes, however, typify the rearguard struggle that is being fought at every level against recognition of the truth about the flying saucers.

We have recently been in correspondence with an orthodox astronomer who claims at the same time to keep an open mind on flying saucers. On the other hand, he invokes the principal of Occam's Razor which, briefly, insists that when one has a choice of alternative solutions to a mystery one should opt for the simpler. In other words, this astronomer would prefer some mundane explanation of the UFOs in preference to the inter-planetary hypothesis. Mr. Smith, of Weymouth, would agree with him: satellites going backwards are much more readily acceptable than an admission that he has photographed a flying saucer. The principle of Occam's Razor, properly applied in this instance, favours the extra-terrestrial explanation for the object, for the other hypotheses are not only complicated but also self-contradictory. If only the hide-bound would just admit that it is a mystery we might be half way towards a solution: the astronomer we have referred to and Mr. Smith are both preferring the complicated to the simple explanation. The inter-planetary hypothesis has stood the test of time because it covers all the facts as we know them—which is just another way of saying that it is the simplest solution that has yet been offered.

TWO RUSSIANS DEAD IN SPACE?

IN our January-February issue, Lou Zinsstag reported that a Swiss amateur radio enthusiast had claimed that he had caught on tape the dying words of a Russian astronaut stranded in space after a successful launching had subsequently met with some mishap. It is therefore interesting to note that hints of this disaster have appeared in the general press. The following account is taken from the London *Observer* of January 14 with a Honolulu date-line:

"United States authorities know the name of one of two Russian spacemen reported to have died in attempts to become the first men in space, according to Lieut-Col. Paul Hickman, of the United States Armed Forces Industrial College Staff. He said here that one attempt coincided with Mr. Krushchev's visit to the United Nations last September. One Russian died when his space vehicle burned up in the earth's atmosphere.

"Lieut-Col. Hickman added that in the past two months Russian space scientists had been demoted because of the failures and that a new team had been put in charge of the experiments."

We are grateful to Mr. Max Dichtl of New York for sending us the following report taken from the *New York Daily News* for February 4:

"Unexplained 'voices' heard on a radio frequency that Russia has used for satellites were monitored in Europe yesterday (February 2) and today (February 3) but as of tonight the National Aeronautics and Space Administration had been unable to pick them up. No one was willing to say yet that the Russians had tried to send a man into space, or had put a man in orbit and failed to bring him down safely. But recordings made by two brothers, Achille and Gianbatista Cordiglia in Turin, Italy, sounded last night and again at noon today like a human voice 'moaning from space'.

"Reporters who listened to the recordings said the sound was something like 'ah . . .' voiced in a suffering tone that was interrupted with heavy breathing.

"A more positive signal was picked up by West Germany's principal satellite listening station, Bochum Observatory. Heinz Kaminski, its director, said radio signals were picked up on a frequency formerly used by Russian satellites. And on another frequency, very close to that one, fragments of Russian language sentences were heard.

"It was considered possible that ground control stations were attempting to contact the satellite—if there was one—as it passed over the Soviet Union. The signals were recorded for two hours yesterday. Kaminski said the voice signals sounded like identifying calls of two radio stations. No Soviet satellite—except debris of earlier ones—is known to be in space."

It would seem that the story by Lou Zinsstag in our January-February issue constituted a world scoop.

DEAD AND ALIVE

A contrast in evidence

A report in the London *Times* for March 17 states that three scientists in New York have been examining the chips of a meteorite that fell to earth in 1864 and that they found substances originating from living matter, suggesting that life either exists or did exist in another part of the universe. The three scientists who made this discovery are Dr. Bartholomew Nagy, who was born in Hungary and who is now Professor of Chemistry at Fordham University, Dr. Douglas Hennessey, another Professor of Chemistry at Fordham, and Dr. Warren Meinschein, of the Esso Research and Engineering Company. The fragments of the meteorite they examined fell near Orgueil in France, on May 14, 1864.

In the chips they examined the scientists detected organic compounds, specifically certain hydrocarbons (molecules composed of hydrogen and carbon atoms) which they interpreted as indicating life. Their analysis of the hydrocarbons are similar to those occurring on earth in living matter. Dr. Meinschein said: "We believe that wherever this meteorite originated, something lived." The two questions the scientists were then faced with where, first, was the stony material found near Orgueil actually a meteorite; and, secondly, had it been contaminated during its 97 years on earth?

The weakness of the scientific approach to the study of flying saucers may be estimated by the report we have just quoted: the evidence obtained from dead matter is studied with respect, but the testimony of the living (however well supported) is first ridiculed and then ignored.

MAIL BAG

Correspondence is invited from our readers, but they are asked to keep their letters short. Unless letters give the sender's full name and address (not necessarily for publication) they cannot be considered. The Editor would like to remind correspondents that it is not always possible to acknowledge every letter personally so he takes this opportunity of thanking all who write to him.

Kraspedon disproved

Sir,—I am sure that your readers watch with interest the reported developments in space exploration and travel, with a view to checking the information given in various "contact stories." This desire to check should not be interpreted as a wish to pick holes in stories that have doubtless been published in good faith, but rather does it become necessary because different stories contradict one another in detail.

For example, Dino Kraspedon in *My Contact with Flying Saucers* quotes the captain of a flying saucer as saying: "Around every inhabited globe in space there is an etheric fluid which envelops it and creates suitable conditions for life." Elsewhere in the book it is stated that this covering, in the case of Earth, extends 253,500 miles into space and the moon, therefore, lies within it.

This etheric or "electric fluid" varies from planet to planet and requires to be manufactured in space: "Without this artificial ether no interplanetary voyage is possible. If you try to make a journey without this precaution you would face certain death. The fluid which binds you to your bodies would leave you and your bodies would instantly be crystallised. This is the mystery of the crystallised bodies which reach the Earth in the form of meteorites; any body in space without ether undergoes this process, whether it be made of carbon, calcium, iron, nickel, or any other element."

The American Pioneer V was reported to be transmitting radio signals when a million miles from Earth and now, in *The Times* of February 27, *Pravda* is reported to have given particulars of the Russian space station on the way to Venus, which "confirmed that it is equipped with an orientation and guidance system."

Communication and control of this nature cannot be expected if the objects had become crystallised.—Derek Dempster.

An Angel Unawares

From Sir John Simeon, Bt.

Sir,—I have read with interest the article "An Angel Unawares" in the January-February issue of FLYING SAUCER REVIEW. However, there are a few points which raise questions in my mind:

1. If the "angel" had actually healed the young drunk and he was at the breakfast table for all to see, why was not the whole hospital agog with excitement at such a miraculous occurrence? No comment seems to have been made on the matter.

2. What was the object of the "angel" guiding the author to Cement? It did not apparently do him any good.

3. If the "angel" was in fact a "Spaceman," why did he not occupy himself with more important matters than the above.

4. It is hard to see why the author did not follow up the intriguing experience of having his thoughts telepathised by two young hospital attendants. Apparently he did not even question them.

5. Finally, the author's facility in sighting UFO's makes one wonder a little as does also the fact of his arriving at the breakfast table half dressed and while there having tears stream down his face without exciting any comment.—John B. Simeon, 4420 West 7th Avenue, Vancouver, British Columbia, Canada.

Sir,—I was extremely interested in Allan Edwards's description of the young man in his article "An Angel Unawares" which appeared in the January-February issue. He describes the shape of his head and the "height of the forehead extending to the back of the head."

Some years ago I remember seeing a small blurred photograph of Mr. Allingham's Martian in the now defunct *Picture Post*. His head was shaped in the same way. I was immediately struck by this at the time. I would be very interested to hear the opinions of others who have seen this photograph.—Mrs. E. Crewe, 1 Warwick Avenue, Milnshaw Estate, Accrington, Lancs.

Saucers and the Press

Sir,—Reference to your September-October editorial, I am sure you are right that there is no conspiracy of silence on the part of the press. Doubtless you saw the news item in the *Daily Telegraph*, September 3, about the "strange sighting over New York," which led readers to belive that a further report might be expected. When none appeared, and because the thing sounded not unlike the Mantell UFO, I wrote to the Editor, receiving this kind reply: "So far, there have been no further sightings of the space object photographed over New York, *but I can assure you that we will report them if there are.*" Newspapers, we may conclude,

are ready enough to publish reports of real news value. On the other hand, the extent to which Security is able to strangle information at birth is another matter altogether.—E. V. Inglesby, 4 Treyew Road, Truro, Cornwall.

Star Fellowship

Sir,—May I take this opportunity of thanking you for publishing details of the STAR Fellowship? The response has been very encouraging, with letters and generous donations coming from many countries, wishing us well in our endeavours.

It is obvious that many people tend to become isolated by their belief in flying saucers. Will readers who could spare the time to write a friendly letter now and then please take advantage of our scheme for exchanging addresses? Relevant details should be accompanied by a stamped and addressed envelope.

We are also planning a picnic here on May 27 for all who are interested; non-members also welcomed. We shall be digging up a field where an old track is supposed to run, in connection with a theory that the old straight tracks were aligned on the same markers that the flying saucers use. Visitors should bring spades and sandwich lunches to: Tye Cross, Chiddingstone, Edenbridge, Kent.—Yours, etc., J. A. Dunkin Wedd, Hon. Sec.

Evolution

Sir,—I must congratulate you on your leading article in the January-February issue just received. It is splendid and a much-needed corrective in these days of "evolutionary" woolly-mindedness. — Kenneth C. Bayman, Benoni, Transvaal, South Africa.

(*The leading article to which Mr. Bayman refers attracted a great deal of attention. The recent discoveries, made by means of radio-astronomy, by Professor Ryle and his associates will, if confirmed, go a long way towards supporting a more fundamentalist view of the universe. The reason why science, as a philosophic method, has fallen into some disrepute is because—particularly in the nineteenth century—scientific "discoveries" were regarded as final and irrevocable. Most of the "discoveries" were refuted within a generation.—Editor.*)

Earth and the Moon

Sir,—According to the Astronomer Royal (Dr. Richard van der Riet Woolley) "the surface of the moon is so inhospitable that there is no question of living on it." It does not follow that because a place looks inhospitable no one can live on it.

The same thing could be said of our Earth. If it were viewed over the North Pole area, by beings far out in space, could they not say—the surface of the Earth is so inhospitable (all frozen wastes) that there is no question of living on it? Because we see no life on the moon does not mean that there is no life there. Things are not always what they seem.—A. M. Davis, 4 Dunblane Road, Eltham, S.E.9.

Tasmania Sighting

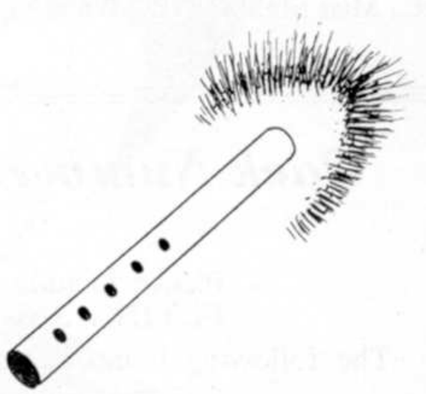
Sir,—I am especially pleased with the March-April issue of the FLYING SAUCER REVIEW. It strikes me as first rate with almost no exception. I am most grateful for all its contents.

In the article about the "clergyman's remarkable testimony" (page 27, paragraph 2) it states: "An Anglican Minister and his wife, previously sceptical about reports of visitors from other planets are sure they have seen flying saucers and a mother ship." Later he states: "I do not believe that the saucers come from another planet," and he adds that he thought they were Russian. I wonder whether it would be possible and wise (chiefly for the benefit of new readers) to refer to the incredible self-contradiction in the Rev. Lionel Browning's statements as printed. — Mrs. L. Pugh, 23 Shelley Road, Worthing.

(*When sceptics are at last confronted with evidence that they can no longer ignore, the shock is often sufficient to cloud their thought. It must also be remembered that the convert, who has laughed at others, will soon recognise that he has become the latest target for ridicule and will prefer to go in at the shallow end. On the other hand, the Rev. Lionel Browning is obviously trying to cling to some mundane explanation of what he saw and the secret weapon theory is a familiar landmark on the road to a full acceptance of the inter-planetary saucer.—Editor.*)

Corroborative Evidence

Sir,—I was most interested to read the letter of D. F. Wright (in the January-February, 1961 issue) in which he describes a sighting he had on November 13 last year, for this was very similar to an object I saw on November 15, just two days later. I wrote up my experience on the same day in the following words: "Tuesday, November 15, 1960. Hampstead, N.W.3. This morning



at 8.30 a.m. I saw a mysterious object hovering above me—it was cylindrical in shape, with a row of four or five windows on the side, fairly high. It appeared to be made of silver metal, extremely brilliant. It made a rapid course of about 45°-60° from the horizontal. It was eventually hidden by house-roofs. The visibility was excellent, the sky clear. The object travelled a b s o l u t e l y silently."

These two reports are so similar that one wonders if they describe the same object. I enclose a sketch of what I saw.—David W. I. C. Vessey, 10 Uphill Grove, Mill Hill, N.W.7.

In the next issue

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by V. A. Firsoff

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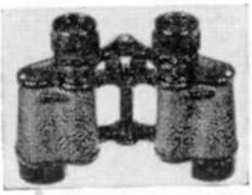

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